Taxonomy of Neotropical Derbidae in the new tribe Mysidiini (Homoptera)

Peter S. Broomfield

Department of Entomology, British Museum (Natural History), Cromwell Road, London SW7 5BD

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Synopsis

The subfamily Derbinae is divided into two tribes, the Derbini and Mysidiini, the latter newly described. Six genera and 136 species are described as new, one subspecies is raised to specific status, four specific synonymies and four combinations are newly established, and one neotype and 17 lectotypes are designated. Keys to the tribes, 10 genera and 182 species are provided.

Introduction

The Derbidae is one of the largest and least-known families of the Fulgoroidea, with probably less than one-fifth of the species currently recognised. It is world-wide in distribution, and the majority of the genera and species are confined to the tropics.

The biology of the Derbidae is little known. The adults are phloem feeders, occurring on a wide variety of trees and shrubs, in grass land, and occasionally on cultivated cereals. In the U.S.A., Dozier (1928) recorded them feeding on numerous species of deciduous trees, frequently in moist situations. In the New World tropics they often appear to be randomly scattered throughout primary and secondary forest, although individual species may occur in very large numbers in plantations. There is little information on their host specificity, and they are of no known major economic importance. The nymphal stages, which are almost completely unknown, are frequently associated with decaying vegetation, and are often numerous amongst the litter of the forest floor or in plantations and orchards. They have been found by the present author in old beetle galleries in rotten timber, which suggests that they feed on fungal exudates.

The family-group name Derbidae was first proposed by Schaum (1850), with Derbe Fabricius (1803) as the type-genus. The family was divided into the Derbinae and Kermesiinae by Kirkaldy (1906), but subsequently the latter subfamily was rendered obsolete when Kermesia was shown to be more correctly placed in the Meenoplidae. Westwood (1840) divided Derbe into seven subgenera: Derbe, Mysidia, Zeugma, Thracia, Phenice, Patara and Cenchrea, all of which have subsequently been raised to generic status. In 1900 Kirkaldy proposed the name Zoraida as a replacement name for Thracia, the latter being preoccupied. Muir (1913), studying the Old World fauna, ignored the subfamilies and divided the family into four 'groups' based on tegminal venation. Later (1917) he rearranged these groupings into the subfamilies Derbinae, Otiocerinae, Cenchreinae and Rhotaninae, including in the Derbinae the genera Zoraida, Zeugma, Mysidia and Sikaiana. In 1918 Muir revised his classification as a result of his study of New World material. Still using characters of the wing and tegminal venation, he separated Zoraida and related genera into a distinct subfamily, the Zoraidinae, which he divided into the tribes Zoraidini and Sikaianini, and relegated the Cenchreinae, Otiocerinae, Derbinae and Rhotaninae to tribes within the Derbinae. This arrangement was confirmed in 1930 and was subsequently followed by Metcalf (1938). Of Westwood's original seven subgenera of Derbe, Muir (1930) assigned Derbe, Mysidia and Zeugma to the Derbini, though he had recognised (1913) that, with the inclusion of Zeugma, such a grouping was not a natural one. Metcalf (1938) erected Pseudomysidia and included it in the Derbini.

This classification was accepted by Metcalf (1945b), and revised by Fennah (1952) who, also using the venation of the tegmina and wings, omitted the subfamily groupings and divided the family directly into the tribes proposed by Muir (1918). Recognising their true affinities he transferred Zeugma to the Zoraidini, and Symidia and Dysimia from the Cenchreini to the Derbini. However, by ignoring subfamilies this classification restricts the grouping of taxa to only two levels below that of family, and does not acknowledge the relationship between the Zoraidini and Sikaianini.

In the present study of the Derbini (sensu Fennah, 1952), the male genitalia have been examined in order to evaluate their importance as taxonomic characters in the group; a secondary objective was to investigate the generic groupings, and to propose a classification whereby the affinities of these genera might be more clearly expressed.

Techniques

The characters of the head may occasionally be obscured by deposits of white wax, which may be removed with a fine paint brush. The measurements in the species descriptions are taken with the insect in dorsal aspect; the width includes the eyes, and the length is from the base to the apex of the anterior extension. In most cases the vertex and frons merge imperceptibly into each other, and the length of the vertex is therefore not included. The length of the froms is assumed to be from its base to a point level with the dorsal margins of the eyes. The proportions of the thorax, and the presence or absence of carinae on the frontal and dorsal surfaces, are important at specific level. These are best observed under incident light at an angle of 45° to the surface under examination. The length of the abdomen varies according to the condition of the specimen. For this reason 'whole body' measurements are unreliable and are not provided.

The pigmentation of the tegmen and wing is frequently faint and occasionally obscured by waxy deposits; it is best observed at low magnification in natural light, against a white background. Frequently, specimens stored in alcohol rapidly lose all pigmentation. For this reason extensive use has been made of characters of the male genitalia, the diagnostic features of which are heavily sclerotised and do not require staining.

The method of preparation of the male genitalia is similar to that employed for those in the majority of auchenorrhynchous Homoptera. The abdomen is best removed entire at its junction with the thorax. After softening in heated 10% KOH, the abdomen is macerated in glacial acetic acid, cleared in clove oil, cleaned in alcohol, and examined in glycerine. Usually the characters of the aedeagus and parameres may then be observed without further dissection. The aedeagus is best examined from several aspects, so that permanent preparations are not recommended;

the lateral aspect is sufficient for examination of the parameres. The female genitalia are not used in the present study.

The terms used in the text are those commonly employed for the Fulgoroidea and are based largely on those of Kramer (1950).

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DERBINAE

Derbini sensu Fennah, 1952: 109.

Species of the New World subfamily Derbinae range from the southern Nearctic region to the southern temperature zone of the Neotropical region, with the greatest number recorded from Central America and tropical South America. They appear to be restricted to moist, frequently forested, habitats and are unknown from either mountainous areas, e.g. the High Andes, or from the desert area of Mexico and the arid Pacific coastlands of South America.

Throughout the subfamily there appears to be a trend towards smaller size with a corresponding reduction in the venation of the tegmina and wings, especially in the medial and cubital areas. This reduction is paralleled in the Zoraidinae, reaching its fullest extent in the Sikaianini. In the Derbinae this tendency is evident by comparison of the tegminal venation of *Derbe*, in which the medial vein has an average of 12 branches, with that of *Symidia*, in which the medial vein has only six branches and the species are among the smallest and most specialised in the subfamily.

A second, related, tendency paralleled in the rest of the Derbidae is the lateral compression of the vertex and frons between the eyes. The extremes of this trend within the Derbinae are shown by the relatively broad and parallel-sided configuration of the vertex and frons in *Derbe*, and the strongly compressed condition of these parts in the more specialised genera *Symidia*, *Mysidaloides* and *Paramysidia*. A third, independent, trend is the shortening of the frons and clypeus with accompanying obsolescence of the longitudinal carinae of the latter, as in *Dysimia*, *Mysidaloides* and *Dysimiella* in contrast to *Derbe*.

While there is little variation in the proportions of the second antennal segment, except for the genus *Mysidaloides*, within the Derbinae, the antennal flagellum tends to migrate from the primitive apical position, as in *Derbe*, to a subapical position as in *Mysidia* and *Neomysidia*.

The male genitalia also show several trends in the Derbinae. The shaft of the aedeagus is horizontal, basically cylindrical, usually symmetrical and usually with anteriorly directed spine-like and/or flap-like processes subapically on the dorsal surface. The ventral surface is rarely armed. The paired parametes are large, usually slightly curved, with their apices directed medially and their ventral margins closely opposed when at rest. In the frequent absence of an extended subgenital plate, the parametes are presumed to shield the aedeagus ventrally and

posteriorly, while dorsal protection is commonly provided by the posterior extension of the hind margin of the anal tube.

The trends within the male genitalia are complex, though often correlated with reduction of the tegmina and constriction of the head. From a comparison with other families of auchenorrhynchous Homoptera, e.g., Membracidae and Cicadellidae, it is assumed that the heavily armed aedeagus bearing simple, paired, spine-like processes on the dorsal surface only, with the ventral surface unarmed, and with the grasping function of the parameres little developed, is the more primitive condition. This condition is seen in Derbe, in which there is also a small degree of asymmetry, and other genera such as Pseudomysidia (Figs 34-80). The tendency for the reduction of the dorsal spine-like processes of the aedeagus, or their replacement completely or partially by flap-like processes, the occasional development of one or more ventral processes, and an accompanying development of the dorsal process of the paramere, are seen in Mysidia and reach the extreme degree in Dysimia (Figs 94-129). A secondary modification occurs in Paramysidia, Ipsemysidia and Amysidiella in which the dorsal process of the paramere is frequently obsolete or absent and is often replaced by a small, hook-like, subbasal secondary process accompanied occasionally (Paramysidia) by pronounced asymmetry of the aedeagus. A separate tendency is seen in *Derbe* in which the aedeagus is heavily armed and the often very complex parameters show a variety of forms consistent with a grasping function during copulation.

The relatively primitive characters of *Derbe*, as seen in the tegminal and wing venation, the proportions of the head, and the distinctly different developmental trends in the male genitalia, set it sufficiently apart from other genera of Derbini (sensu Fennah, 1952) to divide the tribe into two groups. This necessitates the elevation of all the tribes recognised by Fennah, except Sikaianini, to subfamily rank, thereby permitting the division of Derbinae (Derbini sensu Fennah, 1952) into Derbini (type-genus *Derbe*) and Mysidiini (type-genus *Mysidia*). This action also illustrates the close relationship between the Zoraidini and the Sikaianini which remain as tribes within the Zoraidinae, as proposed by Muir (1918). The proposed classification of the Derbidae is as follows.

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| Derbinae | |
|-------------|-------------------|
| Derbini | New World |
| Mysidiini | New World |
| Otiocerinae | New and Old World |
| Cenchreinae | New and Old World |
| Rhotaninae | Old World |
| Zoraidinae | |
| Zoraidini | Old World |
| Sikaianini | New and Old World |
| | |

Key to tribes of Derbinae

- 1 Head with junction of frons and vertex marked by a distinct transverse carina. Tegmen with 20–23 branches of veins extending to posterior and apical margins; medial vein with basal fork not less than 6-branched; cubital vein with 4–6 branches. All branches of medial and cubital veins linked by a continuous oblique band of cross-veins. Wing with subcostal and radial veins fused over c. basal one-third length; total number of branches of medial and cubital veins attaining posterior and apical margins from 6–10 (Fig. 1) DERBINI Schaum
- 2 Head with frons and vertex merging imperceptibly, lacking a transverse carina. Tegmen with never more than 16 branches of veins extending to posterior and apical margins (*Pseudomysidia*), commonly with 11–13; medial vein with basal fork not more than 3-branched; cubital vein never with more than 4 branches. Cross-veins of medial and cubital areas not as above. Wing with subcostal vein obsolete; total number of branches of medial and cubital veins attaining posterior and apical margins not exceeding 5 (Figs 2–11) MYSIDIINI trib. n. (p. 5)

The Derbini is monotypic, the genus *Derbe* consisting of 16 species confined to Central America and northern South America.

TAXONOMY OF NEOTROPICAL DERBIDAE IN THE NEW TRIBE MYSIDIINI (HOMOPTERA)

The Mysidiini is erected to accommodate all the genera of Derbinae except *Derbe*, i.e., *Mysidia, Pseudomysidia, Dysimia* and *Symidia*, and the newly described *Amysidiella, Ipsemysidia, Mysidaloides, Neomysidia, Paramysidia* and *Dysimiella*. Species of the tribe extend from the southern U.S.A. to Uruguay, with the majority occurring in tropical Central and South America. Only one species of *Mysidia* and eight species of *Dysimia* have been recorded from the Caribbean Islands, excluding Trinidad. One *Dysimia* and one *Paramysidia* species are known from the U.S.A.; the former appears to have reached south-eastern U.S.A. by 'island hopping' across the Caribbean, while the latter probably first became established in Texas after dispersing through Central America.

MYSIDIINI trib. n.

Type-genus: Mysidia Westwood, 1840: 83.

Vertex extending not more than one-half of its length beyond eyes, junction with frons not marked by a transverse carina. Frons longer than wide; lateral margins apically subparallel, diverging subbasally. Pronotum longitudinally constricted at mid-dorsal line, not less than 6 times as wide as long. Tegmen $2\cdot0-3\cdot0$ times as long as wide; radial and subcostal veins fused subbasally, combined radial, medial and cubital veins with not more than 16 branches. Wing with subcostal vein obsolete; combined radial, medial and cubital veins with not more than six branches.

The head in dorsal aspect is distinctly broader than long, its width across the eyes being between one and three-fourths greater than its length from the base to the apparent apex of the vertex. The vertex usually extends beyond the eyes for up to one-half its length except in *Mysidaloides*, in which it terminates approximately level with the anterior margins of the eyes, due to the exceptionally large size of the eyes. The junction of the vertex and frons is smoothly, regularly, and obtusely rounded, except in one species of *Dysimia* where it is subacute. The transverse carina present in *Derbe* is absent in the Mysidiini. The basal margin of the vertex is usually transverse, but in *Dysimia, Symidia*, and *Dysimiella*, and to a lesser extent in *Ipsemysidia* and *Paramysidia*, it is broadly and deeply incised medially.

The frons is laterally constricted and is usually from three to seven times as long as its apical width. In *Symidia* and *Pseudomysidia* its length may be up to 20 times its apical width. The ratio between the length and width of the frons is important at specific and sometimes also generic level. In all genera, with the exception of *Symidia* and *Pseudomysidia*, the lateral margins of the frons are strongly divergent from the level of the ventral margins of the eyes to the junction with the clypeus; the degree and regularity of this divergence are also important at generic level. The width of the frons at its junction with the clypeus is much greater than its apical width, varying between one-fourth (*Pseudomysidia*) of to approximately equal to its length (*Dysimiella* and *Neomysidia*), with the other genera occurring between these extremes.

The genae are broadly rounded in lateral aspect, with the exception of a single *Dysimia* species (see above), and extend anteriorly beyond the eyes from one-third to one-half the horizontal diameter of the eye. In *Mysidaloides*, due to the very large size of the eyes, this anterior extension is minimal. The eyes are large and reniform, with the ventral surfaces adjacent to the antennae weakly concave, except in *Mysidaloides* where they are hemispherical.

The second antennal segment is club-shaped, approximately one and one-half times as long as its maximum breadth, except in *Mysidaloides* in which the length is five times the maximum breadth. In the primitive condition, seen in *Symidia*, *Dysimia*, *Pseudomysidia*, and *Dysimiella*, the antennal flagellum arises apically from a truncate second segment. In *Mysida*, *Mysidaloides*, *Amysidiella*, *Paramysidia*, *Ipsemysidia*, and *Neomysidia* the flagellum has assumed a subapical position, and the apex of the segment is narrowly rounded.

The ocelli are commonly distinct and only rarely obscure or obsolete. They are small in *Dysimia, Symidia, Mysidaloides, Ipsemysidia* and *Amysidiella*, variable in size in *Mysidia, Pseudomysidia* and *Dysimiella*, are very large and prominent in *Paramysidia* and *Neomysidia*; they are of diagnostic value at species level in *Mysidia*.

In the majority of genera the clypeus is approximately as long as the frons (the term 'clypeus' being used throughout the text to denote the combined para- and ante-clypeus); in *Dysimiella*,

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however, it is somewhat shorter than the frons, and in *Pseudomysidia* it is up to one-third longer. Slight variation in the length of the clypeus is of specific diagnostic value in many instances. In the primitive condition the clypeus bears distinct and percurrent medial and lateral longitudinal carinae, as seen in *Symidia* and *Pseudomysidia*, and occasionally in *Mysidia*; these are obsolete or absent in the remaining genera.

The rostrum in the primitive condition extends to the apex of the abdomen, as seen in *Pseudomysidia* and *Symidia*. In the majority of genera it terminates approximately level with the hind coxae, except in *Mysidia* where its length is extremely variable and is of value in specific diagnosis.

The pronotum is longitudinally constricted at the mid-dorsal line, with the posterior margin very broadly and deeply incised. In *Mysidia, Paramysidia, Mysidaloides, Dysimiella, Neomysidia, Ipsemysidia* and *Amysidiella*, its maximum width is usually 10–20 times its medial length, though in some species of *Mysidia* it may be so strongly constricted that the width is up to 50 times the medial length. In *Pseudomysidia, Symidia*, and *Dysimia* this constriction is relatively slight, and the width of the pronotum may be as little as 6–8 times its length. The ratio of the length to the breadth of the pronotum varies greatly between species, especially in *Mysidia*, and is often of considerable diagnostic value.

The fronto-lateral surfaces of the pronotum may be distinctly carinate in all genera, though they are not consistently so in *Mysidia* and *Pseudomysidia*; in which genera their presence or absence is of great diagnostic value at species level. In *Symidia* these carinae are greatly elevated and foliaceous, and continue along the lateral and ventral margins to form pronounced antennal foveae; which, although occurring intermittently in other subfamilies of the Derbidiae, are otherwise absent in the Derbinae. The tegulae also vary in the possession of carinae, these being sometimes present in *Mysidia, Pseudomysidia,* and *Dysimia,* although absent in the other genera. The presence or absence of these carinae may be of value at specific level. Both the disc of the mesonotum and the scutellum are approximately as wide as long, their proportions varying little between genera; the former occasionally bears three distinct longitudinal carinae, but these are more usually obsolete or absent.

The tegmen is from two and one-half to three times as long as its maximum breadth (slightly broader in *Dysimiella*) with the radial and sub-costal veins fused over their basal one-third to one-half length. The radial and medial veins are distinct from near their base in *Mysidia*, *Paramysidia*, *Ipsemysidia*, *Pseudomysidia*, and *Mysidaloides*, but in *Symidia*, *Dysimiella*, *Dysimia*, *Neomysidia*, and *Amysidiella* they may be fused for up to one-quarter of their length. The radial vein is usually two branched, although three branches are present in *Symidia*, which also has the usual seven branches of the medial vein reduced to six. The medial vein of *Pseudomysidia* is eleven-branched, a condition unique in the tribe and considered to represent a primitive condition. The number of branches of the cubital vein also varies. The genera *Mysidia*, *Paramysidia*, *Mysidaloides*, *Dysimiella*, *Neomysidia*, *Ipsemysidia*, and *Amysidiella* have four branches; *Pseudomysidia* and *Dysimia* have three; and *Symidia*, perhaps due to the small size of the insects, only two. The total number of branches of the radial, medial and cubital veins is therefore usually thirteen, the exceptions being *Pseudomysidia* with sixteen, *Dysimia* with twelve, and *Symidia* with eleven. In the Derbini the total varies from twenty to twenty-three.

The wing is usually approximately one-half the length of the tegmen, but is somewhat longer in *Dysimiella* and *Paramysidia*, and occasionally longer in *Mysidia*. The subcostal vein is fused throughout its length with the radial vein, in contrast with the Derbini where it is distinct for the greater part of its length. The radial vein is also unbranched. The number of branches of the medial vein is variable; being two in the majority of genera, three in *Pseudomysidia*; in *Dysimia*, *Symidia*, and *Dysimiella* it is unbranched. The cubital vein has either two branches, as in *Pseudomysidia*, *Neomysidia* and *Symidia*, or three, as in *Amysidiella*, *Ipsemysidia*, *Mysidia*, *Mysidaloides*, *Paramysidia*, *Dysimia*, and *Dysimiella*. The total number of branches of the medial and cubital veins therefore varies from three to five, contrasting with the total of six to ten in the Derbini.

The head and body are usually pale yellowish brown, rarely dark brown, with brown, black or red markings frequently present, particularly on the head and the frontolateral surfaces of the pronotum. The tegmina and wings are usually predominently whitish hyaline but may also be clear, yellowish or smoky brown throughout in some species of *Mysidia*. They are frequently marked with darker spots or transverse bands or with the veins and cross veins dark margined. All markings are consistent within species and are of diagnostic value at this level.

The male genitalia are extremely variable in the shape of the aedeagus and parameres, with a distinct correlation in many cases between a reduction in the processes of the former and an increase in those of the latter. This correlation is well illustrated within *Dysimia*, where in the species *numa* Fennah the dorsal process of the paramere is but little developed while the aedeagus is the most highly armed in the genus.

Both the aedeagus and the parameres are of very great diagnostic importance at specific level, especially in the case of externally similar forms, and occasionally at generic level, i.e. *Paramysidia*. The primitive condition appears to be that in which the shaft of the aedeagus is armed subapically with simple, paired, symmetrically arranged, spine-like processes on the dorsal surface only, as in *Pseudomysidia, Amysidiella*, and a few species of *Mysidia*. The development of additional flap-like processes occurs in *Paramysidia, Dysimia, Symidia, Mysidaloides, Dysimiella, Ipsemysidia*, and most species of *Mysidia*. The possession of flap-like processes only, as seen in *Neomysidia* and some species of *Mysidia*, is regarded as being a further development which reaches its most advanced condition in certain species of *Dysimia*, where the grasping function of the aedeagal processes can only be minimal and the parameres appear to have assumed this task during copulation. The ventral surface of the aedeagus is usually unarmed, the exceptions being *Ipsemysidia* and a few species of *Mysidia*. The development of asymmetry in the aedeagal processes, present in *Symidia* and occasionally in *Mysidia*, reaches its greatest extent in *Paramysidia*, where an unpaired medial dorsal process is also present.

The dorsal process of the paramere is well developed in *Mysidaloides* and *Dysimiella*, and in the majority of species of *Mysidia* and *Dysimia*. It is less developed in *Pseudomysidia* and *Symidia*, and greatly reduced in *Amysidiella*, *Ipsemysidia*, *Neomysidia*, and *Paramysidia*, and in some species of *Mysidia* and *Dysimia*. The reduction, or loss, of the dorsal process is often compensated for by the development of a small hook-like secondary process subbasally. Only in *Mysidia* is there the occasional development of an additional process on the ventral surface.

The male subgenital plate is usually short with its posterior margin transverse; only in *Dysimiella* is it strongly produced medially.

The female genitalia appear not to be of taxonomic value at either the generic or specific level, with the possible exception of the subgenital plate. The variation in this character is however too slight to be of use diagnostically.

Key to genera of Mysidiini

| 1 | Medial vein of tegmen with 11 branches extending to posterior and apical margins (Fig. 11) PSEUDOMYSIDIA Metcalf (p. 77) |
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| _ | Medial vein of tegmen with not more than seven branches |
| 2(1) | Cubital vein of tegmen two-branched; medial vein six-branched (Fig. 5) SYMIDIA Muir (p. 108) |
| - | Cubital vein of tegmen three- or four-branched; medial vein seven-branched |
| 3(2) | Cubital vein of tegmen three-branched (Fig. 9) DYSIMIA Muir (p. 87) |
| - | Cubital vein of tegmen four-branched |
| 4(3) | Second antennal segment not longer than 2.5 times maximum width |
| - | Second antennal segment 5.0 times as long as maximum width (Fig. 16) |
| | MYSIDALOIDES gen. n. (p. 98) |
| 5(4) | Wing with medial vein unbranched (Fig. 3). Male with posterior margin of subgenital plate |
| | produced (Fig. 160) DYSIMIELLA gen. n. (p. 96) |
| - | Wing with medial vein two-branched. Male subgenital plate transverse |
| 6(5) | Head with length of frons little greater than width at base, $c. 2.5$ times width at apex (Fig. 31) |
| | NEOMYSIDIA gen. n. (p. 99) |
| - | Proportions of frons not as above |
| 7(6) | Tegmen with subcostal and radial veins fused over c. basal third of length |
| - | Tegmen with subcostal and radial veins fused to c. mid-length |

| 8(7) | Length of frons not less than twice width at base (Fig. 33). Tegmen with radial and medial |
|------|---|
| | veins distinct subbasally (Fig. 7) |
| - | Length of frons less than twice width at base (Fig. 25). Tegmen with radial and medial veins |
| | fused over basal sixth of length (Fig. 4) AMYSIDIELLA gen. n. (p. 101) |
| 9(7) | Pronotal width less than 10 times length at mid-dorsal line (Fig. 21). Length of from 3 times |
| | width at apex (Fig. 26) IPSEMYSIDIA gen. n. (p. 100) |
| - | Pronotal width not less than 10 times length at mid-dorsal line (Fig. 20). Length of frons at |
| | least 4 times width at apex (Fig. 27) PARAMYSIDIA gen. n. (p. 103) |

Checklist of Mysidiini

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MYSIDIINI trib. n. MYSIDIA Westwood acidalioides Fowler adamare sp. n. adusta sp. n. agilis sp. n. albicans (Stål) albifasciata sp. n. albipennis Westwood parviceps Fowler syn. n. amarantha sp. n. amazona sp. n. andes sp. n. ariasi sp. n. asinella sp. n. athena sp. n. augusta sp. n. bella sp. n. bianca sp. n. bibula sp. n. bizzara sp. n. bolivianna sp. n. calliginosa Walker rubra Metcalf syn. n. calypso sp. n. carosella sp. n. cheesemani sp. n. cinerea Fennah claudata sp. n. clava sp. n. cooperi sp. n. costata (Fabricius) decora sp. n. delicatissima Fowler diabola sp. n. diana sp. n. distanti sp. n. distincta sp. n. dollingi sp. n. douglasi sp. n. ecuadoria sp. n. enjebetta sp. n. erecta sp. n. estfarchina sp. n. etheldreda sp. n. fasciata Metcalf flavilla sp. n. formosa sp. n.

fowleri sp. n. fulvodorsalis sp. n. fuscofrontalis sp. n. fuscomaculata sp. n. geoffreyi sp. n. glauca Distant gracilis sp. n. grandis sp. n. harmonia sp. n. havilandi sp. n. hengist sp. n. henrietta sp. n. hyalina sp. n. immaculata sp. n. infedelis sp. n. inquinata sp. n. insania sp. n. insolita sp. n. intima sp. n. isteria sp. n. jamesi sp. n. josianna sp. n. knighti sp. n. krameri sp. n. lacteola sp. n. lactiflora Westwood limpida sp. n. liquida sp. n. lloydi sp. n. lucianna sp. n. lucifera sp. n. maculicosta Fowler maculosa sp. n. magica sp. n. marshalli sp. n. minerva sp. n. molesta sp. n. musica sp. n. mylesi sp. n. nebulosa (Germar) nemorensis sp. n. neoasinella sp. n. neonebulosa Muir nigrifrontalis sp. n. nigrithorax sp. n. nitida sp. n. obscura Metcalf pallescens Metcalf

TAXONOMY OF NEOTROPICAL DERBIDAE IN THE NEW TRIBE MYSIDIINI (HOMOPTERA)

pallida (Fabricius) panamensis sp. n. peregrina sp. n. persephone sp. n. perspicua sp. n. polyhymnia sp. n. pseudocostata sp. n. pseudoerecta sp. n. pseudonebulosa Muir pulchella sp. n. punctifera Metcalf punctum (Fabricius) steinbachi Distant syn. n. quadrifasciata Walker richardsi sp. n. robusta sp. n. sanguinea sp. n. silvana sp. n. simpla sp. n. squamigera (Fabricius) stali sp. n. stigma (Germar) striata sp. n. subfasciata Westwood subfusca Metcalf testacea (Fabricius) citrina Walker syn. n. tikalme sp. n. transversa sp. n. unimaculata sp. n. varia sp. n. venusta sp. n. vista sp. n. whimperi sp. n. williamsi sp. n.

SYMIDIA Muir

bucaya sp. n. flava Muir pintosamia sp. n. pseudoflava sp. n. withycombei sp. n.

DYSIMIA Muir

astarte sp. n. distincta sp. n. fennahi sp. n. fuscoclypeata Fennah jamaicensis (Distant) comb. n. maculata Muir

maculipennis sp. n. morrisi sp. n. *muiri* sp. n. numa Fennah obrieni sp. n. pseudomaculata sp. n. putilla Fennah telfordi sp. n. PSEUDOMYSIDIA Metcalf araguana Fennah stat. n. debora sp. n. delicata sp. n. ecuadoriensis sp. n. fuscovaria Metcalf hindore sp. n. juliana sp. n. lepida sp. n. marshalli sp. n. obnubilia sp. n. pallida sp. n. palmeri sp. n. panamensis sp. n. rubidella (Ball) comb. n. similis sp. n. trinidadensis sp. n. vestis sp. n. AMYSIDIELLA gen. n. micare sp. n. pseudomicare sp. n. DYSIMIELLA gen. n. pennyi sp. n. williamsi sp. n. IPSEMYSIDIA gen. n. beautifica sp. n. MYSIDALOIDES gen. n. trinidadensis sp. n. NEOMYSIDIA gen. n. willisi sp. n. PARAMYSIDIA gen. n. barbara sp. n. boudica sp. n. felix sp. n. mississippiensis (Dozier) comb. n. nigropunctata (Metcalf) comb. n. tessellata sp. n.

vulgaris sp. n.

MYSIDIA Westwood

Mysidia Westwood, 1840: 83. Type-species: Derbe pallida Fabricius, by original designation.

Width of head in dorsal aspect usually from one-quarter to one-half greater than length, rarely more or less. Vertex extending anterior to eyes for between one-third and one-half its length; lateral margins not

highly elevated, strongly converging from base to level of midline of eyes, thence subparallel to apex; base shallowly concave. Frons with lateral margins gradually diverging from apex to base; slender, length usually 4–7 times width at apex, $2\cdot0$ – $3\cdot5$ times width at base, seldom more or less; junction with vertex broadly rounded, indistinct, lacking a transverse carina; lateral carinae very prominent, often semifolinaceus. Genae extending anterior to eyes for one-third to one-half horizontal diameter of eye. Eye weakly reniform, ventral margin adjacent to antennal base weakly concave. Antenna with second segment club-shaped, apex narrowly rounded; length usually $1\cdot5$ – $2\cdot5$ times maximum width; flagellum arising subapically. Ocelli commonly distinct, often small, rarely obscure or obsolete, occasionally very large and prominent. Clypeus broad, not greatly swollen; commonly as long as, or rather longer than, frons; medial carina frequently obsolete or extending only over *c*. apical one-half length or less, seldom distinct or percurrent; lateral carinae commonly not extending over more than basal one-third length, rarely either obsolete or distinct throughout. Rostrum often extending to, or beyond, base of subgenital plate; but frequently terminating at level of hind coxae.

Dorsal surface of pronotum very deeply and broadly constricted at midline; width usually 10–20 times mid-dorsal length, occasionally much greater. Fronto-lateral surfaces often each with a single prominent carina curving horizontally from adjacent to midline of eye to lateral margin. Tegulae occasionally each with a single horizontal carina. Disc of mesonotum often slightly wider than length at midline; medial and two lateral longitudinal carinae rarely distinct and percurrent.

Tegmen usually 6–12 mm long, rarely distinctly shorter or longer; that of the female usually being up to 30 per cent longer than that of the male; length c. 3 times maximum breadth. Medial vein distinct from near base; subcostal and radial veins fused over c. one-third length from base. Radial vein with two branches extending to apical margin; linked to medial vein by a cross-vein at c. two-thirds length, and by another adjacent to apical fork. Medial vein forking at c. two-fifths length, and again at midlength; with seven branches extending to apical and posterior margins, second and third, and fourth fifth, linked by cross-veins. Cubital vein with four branches extending to posterior margin, first linked to apex of clavus and to second, third to fourth, and fourth to first branch of medial vein by cross-veins (Fig. 7).

Wing with length c. one-half to two-thirds that of tegmen. Radial and sub-costal veins fused over rather less than basal half of length, unbranched; the former linked to medial vein by a cross-vein at c. two-thirds length. Medial vein with two branches extending to apical margin, linked to cubital vein by a single cross-vein at c. midlength. Cubital vein with three branches extending to posterior margin.

Head and body usually pale yellowish brown, seldom dark, often with distinct markings. Tegmen and wing often hyaline or whitish hyaline, occasionally deep fuscous, frequently with veins and cross-veins broadly margined smoky brown, often with distinct transverse bands or with apical and posterior margins smoky brown.

Male genitalia with shaft of aedeagus horizontal, basically cylindrical, usually symmetrical, usually slender in lateral aspect, often broadly expanded subapically in vertical aspect. Dorsal surface subapically usually with one or two, rarely three or four, pairs of spine or flap-like processes occasionally extending over lateral surfaces. Lateral and ventral surfaces usually unarmed. Paramere often slender basally, frequently obtusely rounded apically; dorsal surface usually with a well-developed posteriorly produced process bearing opposed projections on its posterior surface; often with a distinct secondary process. Anal tube often very strongly produced and decurved posteriorly, apex often deeply notched at midline. Subgenital segment with lateral and ventral margins occasionally bearing distinct, posteriorly directed processes.

Female with posterior margin of subgenital plate commonly transverse or broadly rounded, rarely strongly produced or shallowly notched medially.

Mysidia was erected by Westwood (1840) as a subgenus of Derbe to accommodate the Fabrician species pallida, squamigera, costata, punctum, testacea and nivea, and his own new species albipennis, lactiflora and subfasciata; further species were added by various authors, mainly Metcalf, Fowler, Distant, Walker, Muir and, more recently, Fennah, bringing the total number to 34.

As a result of the present study the distribution includes Brazil (69 species), Trinidad (7), Surinam (5), Guyana (15), French Guiana (2), Venezuela (4), Colombia (10), Ecuador (11), Bolivia (10), Peru (11), Uruguay (1?), Panama (20), Costa Rica (2), Honduras (4), Belize (2), Guatemala (4), Mexico (2) and Jamaica (1 species).

The localities from which species are recorded more probably reflects, at least in northern South America, intensity of collecting rather than diversity of species; with the exception of Trinidad, Jamaica is the only Caribbean island from which the genus is recorded. Due to the previous confusion and frequent misidentification, most of the published locality data recorded by Metcalf (1945–6) must be regarded as suspect.

Key to species of Mysidia (based on external characters)

It has not been possible to examine the type-material of *stigma*, while the unique holotypes of *cinerea*, *pallida* and *pseudonebulosa* are badly damaged; these species are therefore omitted from this key.

Though external characters are consistent within species, between species they are occasionally slight; in these instances reference should be made to the structure of the male genitalia.

| 1 | | Tegmen entirely dark brown, veins and cross-veins concolorous2Tegmen pale or, if predominantly dark brown, with pale markings6 |
|----|-------|---|
| 2 | (1) | Wing entirely dark brown |
| 3 | (2) | Wing with a narrow, oblique, pale transverse band. Brazil asinella sp. n. (p. 22) Female tegmen more than 11 mm; tegula uniformly pale; fronto-lateral surfaces of |
| | (-) | pronotum each with a distinct, horizontal, scarlet band. Brazil adusta sp. n. (p. 22) |
| - | (2) | Female tegmen less than 10 mm, or with tegula not uniformly pale |
| 4 | (3) | Tegula uniformly dark brown. Brazilpolyhymnia sp. n. (p. 23)Tegula not uniformly dark brown.5 |
| 5 | (4) | Fronto-lateral surfaces of pronotum uniformly pale; tegula with dorsal margins dark |
| | | brown. Brazil, Guyana, Bolivia, Panama, Peru, Trinidad calliginosa Walker (p. 23) |
| - | | Fronto-lateral surfaces of pronotum reddish dorsally; tegula reddish, dorsal margins darker red. Brazil |
| 6 | (1) | Tegmen and wing pale, veins and cross-veins uniformly pale |
| _ | (1) | Tegmen and wing parter, vents and cross-vents uniformly pare- Tegmen and wing either predominantly dark brownish; or, if pale, with cross-veins |
| | | darker than veins; frequently with dark transverse bands |
| 7 | (6) | Tegmen and wing totally devoid of dark markings; costal cell of tegmen sometimes tinged vellowish brown |
| _ | | tinged yellowish brown |
| 8 | (7) | Tegmen more than 10 mm 11 |
| - | (0) | Tegmen less than 10 mm 9 |
| 9 | (8) | Tegmen less than 8 mm; fronto-lateral surfaces of pronotum prominently carinate. Brazil |
| _ | | Tegmen more than 8 mm; fronto-lateral surfaces of pronotum not carinate |
| 10 | (9) | Tegmen with costal cell pale yellowish brown; radial and medial areas hyaline through- |
| | | out. Guyana richardsi sp. n. (p. 25) Tegmen with costal cell hyaline; radial and medial areas smoky brown apically. Brazil |
| _ | | limpida sp. n. (p. 25) |
| 11 | (8) | Tegmen yellowish hyaline. Brazil robusta sp. n. (p. 26) |
| 12 | (11) | Tegmen whitish hyaline12Head and body unicolorous brownish yellow. Tegmen less than 12 mm13 |
| 12 | (11) | Head and body with distinct reddish markings. Tegmen more than 13 mm. Peru |
| | | <i>immaculata</i> sp. n. (p. 27) |
| 13 | (12) | Tegmen with posterior margin weakly tinged smoky brown. Guyana nitida sp. n. (p. 26) |
| | (7) | Tegmen entirely hyaline. Brazil amazona sp. n. (p. 26) Tegmen with a very prominent dark brown spot extending from costal margin to second |
| | (.) | branch of cubital vein at one-third length, Peru, Bolivia, Guyana, Brazil |
| | | punctum (Fabricius) (p. 27) Tegmen not as above 15 |
| 15 | (14) | Tegmen with apical fork of medial vein very narrowly dark brown, not otherwise |
| 10 | (1) | pigmented. Jamaica hyalina sp. n. (p. 28) |
| _ | (1 =) | Tegmen not as above |
| 16 | (15) | Tegmen less than 8.0 mm 17 Tegmen more than 9.5 mm 18 |
| 17 | (16) | Tegmen with a large, prominent, brown spot between apex of clavus and first branch of |
| | ` ´ | cubital vein, otherwise unmarked. Brazil unimaculata sp. n. (p. 28) |
| 10 | (16) | Tegmen with numerous small dark spots. Brazil |
| 10 | (10) | 2 mm. Ecuador |
| _ | | Male tegmen more than 11 mm; tegula with carinae obsolete; width of pronotum more |
| | | than 2 mm. Ecuador, Panama, Costa Rica acidaloides Fowler (p. 29) |

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|----|------|---|
| 19 | (6) | Tegmen brown with pale transverse bands 20 |
| _ | (-) | Tegmen predominantly pale hyaline or, if dark brownish, lacking distinct pale bands 28 |
| 20 | (19) | Tegmen with a single, very narrow, pale transverse band. Brazil neoasinella sp. n. (p. 30) |
| _ | (20) | Tegmen with more than one pale transverse band |
| 21 | (20) | Tegmen with two narrow, pale, transverse bands, both on basal half. Guyana |
| _ | | vista sp. n. (p. 30) Tegmen with four pale transverse bands 22 |
| 22 | (21) | Tegmen with all pale transverse bands extending from costal to posterior margins |
| _ | (21) | Tegmen without all pale transverse bands extending across entire width |
| 23 | (22) | Tegmen with width of alternating light and dark bands approximately equal |
| _ | | Tegmen with pale bands narrower than the dark bands. Ecuador albifasciata sp. n. (p. 31) |
| 24 | (23) | Tegmen pale brown; head in dorsal aspect little wider than long. Brazil |
| | | quadrifasciaWalker (p. 31)Tegmen dark brown; head in dorsal aspect with width considerably greater than length25 |
| 25 | (24) | Male tegmen little more than 7 mm, 3 times maximum width; dorsal surface of abdomen |
| 20 | (21) | basally dark brown. Brazil, Peru transversa sp. n. (p. 32) |
| - | | Male tegmen approximately 8 mm, 2.5 times maximum width; dorsal surface of |
| | | abdomen pale. Bolivia fulvodorsalis sp. n. (p. 32) |
| 26 | (22) | Tegmen more than 8 mm; third pale transverse band faint, broken medially. Brazil |
| | | musica sp. n. (p. 32) |
| - | | Tegmen less than 8 mm; third pale transverse band extending unbroken from costal to claval margins |
| 27 | (26) | Tegmen with pale transverse bands narrower than intervening dark areas; disc of |
| | () | mesonotum deep brown. Brazil williamsi sp. n. (p. 33) |
| - | | Tegmen with pale transverse bands as broad as intervening dark bands; disc of |
| • | (10) | mesonotum pale. Trinidad mylesi sp. n. (p. 33) |
| 28 | (19) | Tegmen and wing predominantly brownish, veins pale-margined |
| - | | Tegmen and wing predominantly pale or, if largely brownish, with veins broadly edged brownish 33 |
| 29 | (28) | Tegmen more than 9 mm |
| - | | Tegmen less than 9 mm 31 |
| 30 | (29) | Tegmen with light and dark markings giving a strongly mottled appearance. Colombia, |
| | | Ecuador, Brazil |
| 21 | (29) | Tegmen not distinctly mottled. Guyana, Brazil tikalme sp. n. (p. 34) Tegmen and wing pale only at margins of veins; fronto-lateral surfaces of pronotum |
| 51 | (29) | distinctly carinate. Brazil |
| _ | | Tegmen and wing with larger cells pale medially; fronto-lateral surfaces of pronotum not |
| | | distinctly carinate |
| 32 | (31) | Rostrum hardly extending beyond hind coxae; tegula carinate. Brazil gracilis sp. n. (p. 35) |
| _ | | Rostrum extending to midlength of abdomen; tegula not carinate. Brazil |
| 33 | (28) | Tegmen and wing predominantly brownish. Guyana, Brazil |
| - | (20) | Tegmen and wing predominantly provinsil. Ouyana, Drazi |
| 34 | (33) | Tegmen with veins and/or cross-veins at least in part broadly margined smoky brown 47 |
| - | Ì. | Tegmen with veins and/or cross-veins not broadly margined smoky brown |
| 35 | (34) | Tegmen and/or wing with distinct darker transverse bands |
| 26 | (25) | Tegmen and wing lacking distinct dark transverse bands |
| 50 | (35) | Scutellum blackish brown. Brazil |
| 37 | (36) | Fronto-lateral surfaces of pronotum each with a large, circular, dark brown spot |
| - | , , | Fronto-lateral surfaces of pronotum either unmarked, or each with a dark band |
| | | extending horizontally from adjacent to eye to lateral margin |
| 38 | (37) | Disc of mesonotum with a pair of large, dark brown spots posteriorly. Bolivia, Vene- |
| | | zuela, Peru liquida sp. n. (p. 37) Disc of mesonotum lacking prominent markings |
| 39 | (38) | Fronto-lateral surfaces of pronotum carinate. Tegmen with a small, dark brown spot at |
| | (30) | apex of anal vein. Brazil (p. 37) |
| - | | Fronto-lateral surfaces of pronotum not carinate. Tegmen not as above. Trinidad, |
| | | Guyana, Brazil, Surinam, Peru, Ecuador costata (Fabricius) (p.40) |

| | Т | TAXONOMY OF NEOTROPICAL DERBIDAE IN THE NEW TRIBE MYSIDIINI (HOMOPTERA) | 13 |
|-----|----------------|---|-----|
| 40 | (37) | Fronto-lateral surfaces of pronotum each with a prominent, dark brown, horizontal band | 41 |
| _ | | | 43 |
| 41 | (40) | | 42 |
| - | | Tegmen with subcostal cell yellowish brown, becoming darker distally, with three | |
| | | irregular brownish spots. Panama fuscofrontalis sp. n. (p. 3 | 38) |
| 42 | (41) | Tegmen less than 10 mm. Pronotum with maximum width less than 20 times length at | |
| | ` ´ | mid-dorsal line. Guatemala, Belize, Honduras, Brazil albipennis Westwood (p. 3 | 38) |
| - | | Tegmen more than 10 mm. Pronotum with maximum width greater than 40 times length | - / |
| | | at mid-dorsal line. Brazil lactiflora Westwood (p. 3 | 39) |
| 43 | (40) | Wing broadly brownish at level of radial-medial cross-vein. Ecuador diana sp. n. (p. 4 | 13) |
| _ | () | | 44 |
| 44 | (43) | Tegmen and wing with posterior and apical margins dark smoky brown between veins; | |
| | | wing with a small dark spot adjacent to first branch of cubital vein. Colombia | |
| | | | 12) |
| - | | Tegmen and wing not as above | 45 |
| 45 | (44) | Tegmen with costal cell hyaline | 46 |
| - | | Tegmen with costal cell opaque yellowish brown | |
| | | Panama, Costa Rica: dollingi sp. n. (p. 43); Peru, Ecuador, Brazil, Guyana: pseudocos- | |
| | | <i>tata</i> sp. n. (p. 41); Bolivia: <i>bianca</i> sp. n. (p. 4 | 12) |
| 46 | (45) | Tegmen more than 9.0 mm. Tegmen and wing with faint yellow transverse bands. | |
| | | French Guiana, Trinidad (p. 3 | 39) |
| - | | Tegmen less than 8.5 mm. Tegmen and wing unmarked. Mexico delicatissima Fowler (p. 4 | |
| 47 | (34) | | 48 |
| _ | <i></i> | | 66 |
| 48 | (47) | Fronto-lateral surfaces of pronotum with alternating deep brown and white horizontal | |
| | | bands. Brazil striata sp. n. (p. 4 | |
| - | (40) | | 49 |
| 49 | (48) | | 50 |
| - | (40) | | 54 |
| 50 | (49) | Fronto-lateral surfaces of pronotum pale dorsally, deep brown ventrally. Brazil, Peru, Surinam | (4) |
| | | | 51 |
| 51 | (50) | | 51 |
| 51 | (50) | fowleri sp. n. (p. 4 | (6) |
| _ | | Fronto-lateral surfaces of pronotum unicolorous | 52 |
| 52 | (51) | Wing with apex broadly smoky brown. Brazil <i>calypso</i> sp. n. (p. 4 | |
| _ | (01) | | 52 |
| 53 | (52) | Ocelli prominent. Tegmen with veins dark brown. Brazil peregrina sp. n. (p. 4 | |
| - | ` ' | Ocelli obsolete. Tegmen with veins yellowish; cross-veins dark. Brazil, Surinam | |
| | | lucianna sp. n. (p. 4 | 15) |
| 54 | (49) | Tegula uniformly pale | 56 |
| - | | | 55 |
| 55 | (54) | Tegula entirely very dark brown. Brazil squamigera (Fabricius) (p. 4 | 10) |
| - 1 | | Tegula dark brown dorsad of base of tegmen only. Panama grandis sp. n. (p. 4 | 6) |
| 56 | (54) | Fronto-lateral surfaces of pronotum each with a very distinct, narrow, horizontal, | - |
| | | orange band. Belize minerva sp. n. (p. 4 | |
| | $(\tau ())$ | | 57 |
| 57 | (56) | Tegmen and wing with veins and/or cross-veins margined smoky brown, lacking other | 60 |
| | | | 60 |
| - | | Tegmen and wing with distinct brownish markings in addition to those around veins and cross-veins | 58 |
| 58 | (57) | | 59 |
| - | (37) | Fronto-lateral surfaces of pronotum uniformly pale. Panama <i>punctifera</i> Metcalf (p. 4 | |
| 59 | (58) | Dorsal surface of abdomen with a large, dark brown, spot on either side of midline | ., |
| | (| basally. Guatemala (p. 4 | (8) |
| _ | | Dorsal surface of abdomen uniformly pale. Brazil molesta sp. n. (p. 4 | (8) |
| 60 | (57) | Tegmen with posterior margin broadly and continuously smoky brown. Panama | |
| | | obscura Metcalf (p. 4 | 9) |

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|-----------|---|--------|
| _ | Tegmen with posterior margin either hyaline, or narrowly and intermittently smoky | |
| | brown | |
| 61 (60) | Head with genae pale, unicolorous yellowish brown | |
| - | Head with genae not uniformly pale | 2 |
| 62 (61) | Head with genae narrowly dark reddish brown adjacent to eyes. Brazil | |
| _ | henrietta sp. n. (p. 49 Head with genae dull brownish dorsally | 1 |
| 63 (62) | Tegmen with external margins of medial, radial, and subcostal areas dark smoky brown | 5 |
| 00 (02) | medially. Belize, Honduras |) |
| - | medially. Belize, Honduras | j. |
| 64 (61) | Tegmen with costal cell hyaline with numerous irregular brown spots 6 | 5 |
| - | Tegmen with costal cell yellowish brown, with a single, brownish, spot at level of point of | |
| (5 ((A) | separation of fused subcostal and radial veins. Brazil, Surinam nemorensis sp. n. (p. 51 |) |
| 65 (64) | Tegmen densely mottled smoky brown over basal third. Ocelli large. Belize, Honduras | ` |
| _ | Tegmen with basal third predominantly hyaline. Ocelli obsolete. Mexico | , |
| | enjebetta sp. n. (p. 51 |) |
| (66) (47) | Fronto-lateral surfaces of pronotum broadly dark brown/black medially. Dorsal | ' |
| | surface of abdomen with a large deep red spot. Panama nigrifrontalis sp. n. (p. 52 |) |
| - | Pigmentation of pronotum and abdomen not as above | 7 |
| 67 (66) | Fronto-lateral surfaces of pronotum each with a distinct orange band extending horizon- | |
| | tally from adjacent to eye to lateral margin | |
| 68 (67) | Fronto-lateral surfaces of pronotum yellowish brown, unmarked | |
| - (07) | Tegmen less than 10 mm, predominantly hyaline | |
| 69 (68) | Clypeus with medial carina percurrent; ocelli prominent; tegula not carinate. Panama. | |
| (00) | <i>bibula</i> sp. n. (p. 53 |) |
| - | Clypeus with medial carina obsolete; ocelli small; tegula carinate. Ecuador | ĺ |
| | ecuadoria sp. n. (p. 53 | ć. |
| 70 (67) | Fronto-lateral surfaces of pronotum distinctly carinate | _ |
| 71 (70) | Fronto-lateral surfaces of pronotum not carinate | 2 |
| /1 (/0) | Trinidad |) |
| _ | Fronto-lateral surfaces of pronotum with carinae narrowly edged reddish brown. | ' |
| | Peru augusta sp. n. (p. 54 |) |
| 72 (70) | Tegmen with an irregular brownish transverse band at one-third length, another very | |
| | irregular band over second fork of medial vein. Ocelli small | |
| 73 (72) | Tegmen not as above. Ocelli prominent | 3 |
| 13 (12) | Costa Rica | 5 |
| _ | Pronotum with width approximately 15 times length at mid-dorsal line | |
| 74 (72) | Tegmen more than 8 mm. Head with vertex pale. Bolivia, Colombia erecta sp. n. (p. 55 | - |
| - | Tegmen less than 8 mm. Basal angles of vertex dark brown krameri sp. n. (p. 54 | |
| 75 (73) | Frons less than 6 times width at apex; clypeus longer than frons. Ecuador | |
| | maculosa sp. n. (p. 55 |) |
| - | Frons more than 6 times width at apex; clypeus shorter than frons. Bolivia bizzara sp. n. (p. 56 | 5 |
| 76 (35) | | ッ 7 |
| - | Tegmen and wing yellowish, tegmen with dark transverse bands | |
| 77 (76) | Wing with two brownish transverse bands. Brazil intima sp. n. (p. 56 |) |
| - | Wing with a single dark transverse band | |
| 78 (77) | Wing with dark transverse band extending from costal margin to apex of clavus. Brazil | ~ |
| | infedelis sp. n. (p. 57 |) |
| _ | Wing with dark transverse band extending from medial-radial cross-vein to apex of clavus. Guyana | 1 |
| 79 (76) | Thorax and abdomen predominantly dark brown. Brazil diabola sp. n. (p. 57 | 3 |
| - | Thorax and abdomen predominantly gale velowish brown | - |
| 80 (79) | Fronto-lateral surfaces of pronotum distinctly carinate | |
| - | Fronto-lateral surfaces of pronotum not carinate | |

| | T | AXONOMY OF NEOTROPICAL DERBIDAE IN THE NEW TRIBE MYSIDIINI (HOMOPTERA) | | 15 |
|-----|-------|---|-----|------------|
| 81 | (80) | Wing with two distinct smoky brown transverse bands. Brazil <i>lloydi</i> sp. n. Wing lacking dark transverse bands. Panama <i>fuscomaculata</i> sp. n. | | |
| 82 | (80) | Tegula each with a distinct horizontal carina Tegula not carinate | | 83 87 |
| 83 | (82) | Fronto-lateral surfaces of pronotum orange at level of eyes. Pronotum with width less than 20 times length at mid-dorsal line | | 84 |
| - | | Fronto-lateral surfaces of pronotum concolorous dull yellowish. Pronotum with width greater than 25 times length at mid-dorsal line | | 85 |
| 84 | (83) | Tegmen with four faint transverse bands. Braziladamare sp. n.Tegmen with two faint transverse bands. Peruisteria sp. n. | (p. | 60) 59) |
| 85 | (83) | Head with genae adjacent to eyes dark brownish. Panama pallescens Metcalf Head with genae pale throughout | (p. | 60) 86 |
| 86 | (85) | Tegmen with three irregular smoky brown transverse bands, apex brownish. Ecuador insania sp. n. | | 60) |
| - | | Tegmen with two very faint, transverse bands, apex hyaline. Panama panamensis sp. n. | (p. | |
| 87 | (82) | Tegmen with a single distinct dark transverse band | 1 | 8 8 |
| _ | () | Tegmen with at least two dark transverse bands | | 90 |
| 88 | (87) | Genae adjacent to eyes, and posterior margin of pronotum, deep red. Venezuela | | |
| | | formosa sp. n. Genae and pronotum not as above | (p. | 61) 89 |
| - | (00) | Disc of mesonotum deep orange. Ecuador | (n) | ~ ~ |
| 89 | (88) | Disc of mesonotum deep of ange. Ecuador | (p. | 62) |
| 00 | (87) | Tegmen with two dark transverse bands | ψ· | 91 |
| 90 | (07) | Tegmen with three or more dark transverse bands | | 101 |
| 91 | (90) | Tegmen with distal transverse band extending only over cubital area | | 92 |
| _ | ()0) | Tegmen with distal transverse band extending to costal margin | | 94 |
| 92 | (91) | Fronto-lateral surfaces of pronotum each with a narrow, light orange band extending | r | |
| 12 | ()1) | horizontally from adjacent to eye to lateral margin. Brazil clava sp. n. | (p. | 62) |
| - | | Fronto-lateral surfaces of pronotum unicolorous yellowish brown | | 9Ś |
| 93 | (92) | Pronotum with width less than 20 times length at mid-dorsal line; fronto-lateral surfaces | ; | (2) |
| | | carinate. Ecuador | | 03) |
| - | | Pronotum with width greater than 30 times length at mid-dorsal line; fronto-lateral surfaces not carinate. Trinidad, Brazil | (n | 67) |
| 04 | (91) | Disc of mesonotum blackish brown. Peru | | |
| 94 | (91) | Disc of mesonotum plae | | 95 |
| 05 | (94) | Wing with two smoky brown transverse bands. Panama subfusca Metcalf | (n. | |
| - | (24) | Wing either with a single transverse band, or such markings absent | (p. | 96 |
| 96 | (95) | Wing with a distinct transverse band | | 98 |
| - | (,,,) | Wing without transverse markings | | 97 |
| 97 | (96) | Pronotum with width less than 20 times length at mid-dorsal line. Brazil | | |
| | | <i>estfarchina</i> sp. n. | (p. | 64) |
| - | | Pronotum with width more than 20 times length at mid-dorsal line. Brazil | | |
| | | subfasciata Westwood | (p. | 64) |
| 98 | (96) | Tegmen with claval area dark brown. Panama fasciata Metcalf | (p. | |
| - | | Tegmen with claval area pale | | 99 |
| 99 | (98) | Tegmen with distal transverse band at level of second fork of medial vain. Panama <i>douglasi</i> sp. n. | (n | 65) |
| | | Tegmen with distal transverse band at level of radial-medial cross-vein | | 100 |
| 100 | (99) | Tegmen with distal transverse band at level of radial-medial closs com finance of the second at the | | 100 |
| | . , | knighti sp. n. | (p. | 66) |
| - | | Tegmen with distal transverse band as wide as, and little paler, than basal band. Brazil | , | α |
| 101 | (00) | <i>pulchella</i> sp. n. | (p. | |
| 101 | (90) | Tegmen with three dark transverse bands | | 102 112 |
| 100 | (101) | Tegmen with four or more dark transverse bands | | 103 |
| 102 | (101) | Pronotum with width more than 30 times length at mid-dorsal line | • | 105 |
| 102 | (102) | Pronotum with width less than 30 times length at mid-dorsal line Wing lacking distinct markings. Female with length of tegmen not less than 11 mm. Peru | | 105 |
| 103 | (102) | distinct markings. Female with length of tegmen not less than 11 mm. Fere distincta sp. n. | (n | 66) |
| | | unormeta op. m. | 1. | / |

| _ 104(103) | Wing with two distinct transverse bands. Female with length of tegmen less than 11 mm. 104 Wing with basal transverse band at level of first fork of cubital vein, unbroken. Brazil hengist sp. n. (p. 67) |
|---------------|--|
| _ | Wing with basal transverse band at level of medial-cubital cross-vein, interrupted |
| 105(100) | medially. Brazil, Trinidad |
| 105(102) | Disc of mesonotum with a dark brown spot medially. Brazil pseudoerecta sp. n. (p. 68) Disc of mesonotum unicolorous brownish yellow |
| 106(105) | Pronotal width not more than 22 times length at mid-dorsal line |
| - | Pronotal width not less than 25 times length at mid-dorsal line |
| 107(106) | Wing with cubital-medial cross-vein broadly margined pale smoky brown, lacking |
| | distinct transverse bands. Brazil |
| - 108(107) | Wing with one or two distinct transverse bands108Wing with a single transverse band109 |
| - | Wing with not less than two transverse bands |
| 109(108) | Wing with posterior and apical margins dark smoky brown. Brazil, Guyana |
| | <i>agilis</i> sp. n. (p. 69) |
| - | Wing with posterior and apical margins hyaline. Brazil |
| 110(108) | Wing with two dark transverse bands. Brazil jamesi sp. n. (p. 70) Wing with three transverse bands |
| - 111(110) | Wing with second transverse band extending unbroken from apex of clavus to medial |
| () | vein. Bolivia carosella sp. n. (p. 70) |
| - | Wing with second transverse band interrupted between first and second branches of |
| 110(101) | cubital vein. Colombia harmonia sp. n. (p. 70) |
| 112(101) | Tegmen with four transverse bands 115 Tegmen with five or six transverse bands 113 |
| 113(112) | Tegmen with six transverse bands. Peru silvana sp. n. (p. 71) |
| _ | Tegmen with five transverse bands |
| 114(113) | Tegmen more than 8 mm. Pronotal width more than 25 times length at mid-dorsal line. |
| | Brazil |
| - | Tegmen less than 8 mm. Pronotal width less than 20 times length at mid-dorsal line. Brazil |
| 115(112) | Head with genae adjacent to eyes narrowly very dark brown. Bolivia bolivianna sp. n. (p. 72) |
| _ | Head with genae pale throughout |
| 116(115) | Ocelli very large and prominent. Brazil persephone sp. n. (p. 73) |
| - | Ocelli small, not prominent |
| 117(116) | Wing with three dark transverse bands. Bolivia |
| 118(117) | Wing with two pale brownish transverse bands. Guyana |
| - | Wing lacking distinct transverse bands 119 |
| 119(118) | Fore tibia and tarsi unicolorous pale yellow |
| - | Fore tibia with a narrow dark brown band subapically, tarsi brownish. Ecuador |
| 120(119) | Antenna very long, extending well beyond anterior margins of genae. Surinam |
| 120(119) | magica sp. n. (p. 74) |
| - | Antenna short, not extending beyond anterior margins of genae. Bolivia, Peru |
| | geoffreyi sp. n. (p. 75) |

Key to species of Mysidia (based on male genitalia)

It has not been possible to examine the male genitalia of the following species, which are therefore omitted from this key: *immaculata, lactiflora, maculicosta, punctifera, quadrifasciata, squamigera, stigma, subfasciata* and *subfusca*. The genitalia of *robusta* are damaged, and this species is also omitted.

| 1 | | Paramere with a ventral process | 2. |
|---|-----|--|-------|
| _ | | Paramere lacking a ventral process | 11 |
| 2 | (1) | Paramere with primary dorsal process absent (Fig. 391) fowleri sp. n. (p | 0.46) |
| _ | | Paramere with primary dorsal process well developed | 3 |
| 3 | (2) | Paramere with ventral process situated subbasally | 4 |
| - | | Paramere with ventral process situated at, or distal to, midlength | 6 |

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| | Т | AXONOMY OF NEOTROPICAL DERBIDAE IN THE NEW TRIBE MYSIDIINI (HOMOPTERA) | | 17 |
|----|------|--|-----|-------------|
| 4 | (3) | Shaft of aedeagus with subapical dorsal processes rounded, flap-like (Fig. 174) | | |
| | | distanti sp. n. | (p. | 49) |
| - | | Shaft of aedeagus with subapical dorsal processes long, slender, spine-like | | 5 |
| 5 | (4) | Shaft of aedeagus with lateral pair of subapical processes short, medial pair apically bifurcate (Fig. 175) | | 60) |
| _ | | Shaft of aedeagus with lateral processes long, medial processes simple (Fig. 176) | (p. | 09) |
| | | <i>pulchella</i> sp. n. | (p. | 66) |
| 6 | (3) | Shaft of aedeagus with subapical processes long and spine-like (Fig. 177) | | |
| | | fulvodorsalis sp. n. | (p. | 32) |
| 7 | (0) | Shaft of aedeagus with subapical processes flap-like | | - 7 |
| 7 | (6) | Paramere with ventral process small and hook-like (Fig. 396) douglasi sp. n. Paramere with ventral process large and rounded | (p. | 05) |
| 8 | (7) | Paramere with primary dorsal process vertically directed (Fig. 397) bizzara sp. n. | (n | 56) |
| _ | (.) | Paramere with primary dorsal process strongly inclined posteriorly | | 9 |
| 9 | (8) | Paramere with dorsal surface strongly dorsally produced subapically (Fig. 399) | | 10 |
| - | (-) | Paramere with apex rounded (Fig. 398) jamesi sp. n. | (p. | 70) |
| 10 | (9) | Shaft of aedeagus with subapical flap-like processes dorsally directed (Fig. 289) | , | C1) |
| | | enjebetta sp. n. Shaft of aedeagus with subapical flap-like processes not dorsally directed (Fig. 290) | (p. | 51) |
| - | | carosella sp. n. | (n. | 70) |
| 11 | (1) | Paramere with a small, hook-like, secondary dorsal process subbasally | (P) | 12 |
| - | . , | Paramere with secondary dorsal process either large and rounded or absent | | 14 |
| 12 | (11) | Paramere with primary dorsal process absent (Fig. 401) peregrina sp. n. | (p. | 45) |
| 12 | (10) | Paramere with primary dorsal process distinct. | | 13 |
| 13 | (12) | Shaft of aedeagus with lateral subapical processes apically bifurcate (Fig. 183) venusta sp. n. | (n | 24) |
| _ | | Shaft of aedeagus with lateral subapical processes apically simple (Fig. 184) | (p. | 24) |
| | | augusta sp. n. | (p. | 54) |
| 14 | (11) | Paramere with dorsal margin strongly produced and folded towards midline along entire | ; | |
| | | length | | 15 |
| 15 | (14) | Paramere with dorsal margin not produced throughout | | 17 |
| 15 | (14) | Shaft of aedeagus with subapical dorsal processes each bearing a small acute spine (Fig. 295) | n | 37) |
| _ | | Shaft of aedeagus with subapical dorsal processes greatly produced and apically bifur- | | 57) |
| | | cate | | 16 |
| 16 | (15) | Shaft of aedeagus with apices of subapical dorsal processes almost meeting at midline | | |
| | | (Fig. 186) amazona sp. n. Shaft of aedeagus with apices of subapical dorsal processes diverging (Fig. 187) | (p. | 26) |
| _ | | | (n | 18) |
| 17 | (14) | Paramere with primary dorsal process large | (þ. | 19 |
| - | () | Paramere with primary dorsal process reduced or absent | | 18 |
| 18 | (17) | Paramere with primary dorsal process obsolete; secondary dorsal process small, bearing | 5 | |
| | | three acute spines (Fig. 407) | (p. | 35) |
| - | | Paramere with primary dorsal process absent; secondary dorsal process large, hook-like, basally directed (Fig. 408) | In | 76) |
| 19 | (17) | Paramere with primary dorsal process produced dorsally and/or posteriorly | (p. | 29 |
| - | () | Paramere with primary dorsal process produced dorsally and/or posteriorly | | 20 |
| 20 | (19) | Paramere with primary dorsal process bearing interlocking surfaces | | 23 |
| _ | | Paramere with primary dorsal process lacking interlocking surfaces | | 21 |
| 21 | (20) | Shaft of aedeagus dorsally with two pairs of acute spine-like subapical processes (Fig. | | (0) |
| _ | | 190) agilis sp. n. Shaft of aedeagus dorsally with a single pair of flap-like processes | (p. | 69) 22 |
| 22 | (21) | Paramere with primary dorsal process bearing a single, posteriorly directed, spine-like | | |
| _ | () | projection only (Fig. 410) | (p. | 53) |
| | | projection only (Fig. 410) ecuadoria sp. n. Paramere with primary dorsal process bearing a long, curving, hook-like projection and | | |
| 22 | (20) | a small spine (Fig. 411) decora sp. n. | (p. | 72) |
| 23 | (20) | Paramere bearing a long, medially directed secondary process distad of primary process (Fig. 412) | (n | 30) |
| _ | | Paramere lacking a secondary dorsal process | (p. | 24 |
| | | Baserson and a store brokens and a store s | | |

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|----------|-------------|---|
| 24 | (23) | Shaft of aedeagus with slender, apically bifurcate, lateral processes (Fig. 194) |
| | ` ´ | cheesemani sp. n. (p. 54) |
| - | | cheesemani sp. n. (p. 54) Shaft of aedeagus lacking lateral processes 25 |
| 25 | (24) | Shaft of aedeagus with subapical dorsal processes strongly bifurcate |
| ~ | $(0, \tau)$ | Shaft of aedeagus with subapical dorsal processes not bifurcate |
| 26 | (25) | Paramere with anterior component of primary dorsal process strongly curving posterior- |
| | | ly (Fig. 414) nemorensis sp. n. (p. 51) Paramere with anterior component of primary dorsal process inclined anteriorly (Fig. |
| - | | (115) nolyhymnia sp. p. (p. 23) |
| 27 | (25) | 415) polyhymnia sp. n. (p. 23) Shaft of aedeagus with dorsal components of subapical processes strongly hooked |
| 21 | (23) | posteriorly (Fig. 307) (p. 25) |
| _ | | Shaft of aedeagus with dorsal components of subapical processes regularly curving |
| | | posteriorly |
| 28 | (27) | Paramere with anterior and posterior components of dorsal process of approximately |
| | | equal size (Fig. 417) nitida sp. n. (p. 26) |
| - | | Paramere with posterior component of dorsal process larger than the anterior (Fig. |
| | (4.0) | 418) amarantha sp. n. (p. 74) |
| 29 | (19) | Paramere with dorsal process slender, greatly produced dorsally, apex hooked, lacking |
| | | interlocking surfaces |
| - | | interlocking surfaces present |
| 30 | (29) | Shaft of aedeagus in dorsal aspect with maximum width greater than two-thirds length |
| 50 | (2)) | (Fig. 201) erecta sp. n. (p. 55) |
| _ | | Shaft of aedeagus in dorsal aspect with maximum width little greater than one-half |
| | | length (Fig. 202) (p. 68) |
| 31 | (29) | Paramere with dorsal process bearing two interlocking surfaces, or with only the basal |
| | | surface present |
| - | | Paramere with only the distal interlocking surface present |
| 32 | (31) | Paramere with a large, acute, medially directed process on dorsal surface subapically |
| | | (Fig. 421) |
| 22 | (32) | r dramere not bit engly produced apready internet internet in the |
| 33 | (32) | (Fig. 313) knighti spin active subapicanty bearing numerous small active spines (Fig. 313) |
| _ | | Shaft of aedeagus with ventral surface unarmed (Fig. 314) persephone sp. n. (p. 73) |
| 34 | (31) | Paramere with basal interlocking surface hook-like, distal surface obsolete (Fig. 424) |
| | . / | <i>minerva</i> sp. n. (p. 47) |
| _ | | Paramere with both interlocking surfaces well developed |
| 35 (| (34) | Paramere with basal interlocking surface greatly produced, curving dorsally and post- |
| | | eriorly (Fig. 425) harmonia sp. n. (p. 70) |
| - | (05) | Paramere with basal interlocking surface not produced |
| 30 | (35) | Paramere with a large, medially directed, apically acute process covered with very small tooth-like spines on dorsal margin distad of primary dorsal process |
| _ | | tooth-like spines on dorsal margin distad of primary dorsal process37Paramere lacking a secondary process38 |
| 37 | (36) | Shaft of aedeagus bearing long, acute, spine-like processes on dorsal surface subapically |
| 51 | (30) | (Fig. 318) bianca sp. n. (p. 42) |
| _ | | Shaft of aedeagus with flap-like processes only (Fig. 319) pseudocostata sp. n. (p. 41) |
| 38 | (36) | Paramere with dorsal process produced posteriorly |
| - | | Paramere with dorsal process not produced posteriorly |
| 39 | (38) | Paramere with dorsal process slender, dorsally directed (Fig. 428) bibula sp. n. (p. 53) |
| _ | (| Paramere with dorsal process broadly rounded |
| 40 | (39) | Shaft of aedeagus in vertical aspect with length greater than three times maximum width |
| | | (Fig. 210) panamensis sp. n. (p. 61) |
| <u>_</u> | (40) | Shaft of aedeagus with length less than three times maximum width |
| 41 | (40) | curving dorsally (Fig. 321) isteria spect with subapical dorsal processes very stender, apress |
| _ | | Shaft of aedeagus in lateral aspect with subapical processes broad, apices inclined |
| | | antero-ventrally (Fig. 322) estfarchina sp. n. (p. 64) |
| 42 | (38) | Paramere with dorsal process bearing a ventrally directed node-like projection at |
| | | somewhat distad of midlength (Fig. 432) insolita sp. n. (p. 51) |

| | Т | AXONOMY OF NEOTROPICAL DERBIDAE IN THE NEW TRIBE MYSIDIINI (HOMOPTERA) | 19 |
|-----|------|---|--------------|
| | | Paramere with dorsal process simple | 43 |
| 43 | (42) | Shaft of aedeagus with ventrally directed processes subapically on ventral surface | 44 49 |
| 44 | (43) | Shaft of aedeagus with subapical process assymmetrical (Fig. 214). Paramere with apex | 77 |
| | | strongly produced dorsally (Fig. 433) athena sp. n. (| p. 28) |
| - | | Shaft of aedeagus symmetrical. Paramere with apex not produced dorsally | 45 |
| 45 | (44) | Shaft of aedeagus slender, almost parallel-sided in dorsal aspect | 46 |
| _ | (15) | Shaft of aedeagus considerably expanded subapically | 48 |
| 46 | (45) | Shaft of aedeagus with ventral processes only (Fig. 325) sanguinea sp. n. (| |
| - | (10) | Shaft of aedeagus with both dorsal and ventral processes | 47 |
| 47 | (46) | Paramere with apex simple, acute; dorsal process situated at three-fifths length (Fig. | 20) |
| _ | | 435) acidaloides Fowler (Paramere with apex obtusely rounded, bearing an acute, medially curving process; | p. 29) |
| | | dorsal process subapical (Fig. 436) krameri sp. n. (| n 54) |
| 48 | (45) | Shaft of aedeagus with two pairs of ventral spine-like processes subapically (Fig. 328) | p. 54) |
| | () | adusta sp. n. (| n. 22) |
| - | | Shaft of aedeagus with a single pair of ventrally curving spine-like processes apically | |
| | | (Fig. 329) | p. 36) |
| 49 | (43) | Shaft of aedeagus with subapical processes flap-like and/or spine-like; if flap-like then | . , |
| | | terminating in long acute spines | 61 |
| - | (40) | Shaft of aedeagus with subapical processes flap-like, not terminating in long acute spines | 50 |
| 50 | (49) | Shaft of aedeagus with subapical processes each bearing a small, laterally directed, acute | |
| | | spine subbasally (Fig. 219) richardsi sp. n. (Shaft of aedeagus with subapical processes not as above | |
| 51 | (50) | Paramere with a large, medially directed, secondary dorsal process distad of primary | 51 |
| 51 | (50) | process (Fig. 440) costata (Fabricius) (| n 40) |
| _ | | Paramere lacking a secondary dorsal process | p. 40) 52 |
| 52 | (51) | Paramere very broadly rounded, length from base of apodeme to apex very little greater | 52 |
| | · / | than maximum width (Fig. 441) adamare sp. n. (| p. 60) |
| - | | Paramere with length well in excess of 1.5 times maximum width | 53 |
| 53 | (52) | Shaft of aedeagus in dorsal aspect more than four times maximum width; subapical | |
| | | processes longitudinally aligned and dorsally directed (Fig. 222) simpla sp. n. (| p. 63) |
| - | | Shaft of aedeagus in dorsal aspect less than 3.5 times maximum width; subapical | |
| 54 | (52) | processes transversally aligned and anteriorly directed. | 54 |
| 54 | (53) | Shaft of aedeagus in dorsal aspect less than twice maximum width (Fig. 224) | |
| _ | | Shaft of aedeagus in dorsal aspect not less than 2.5 times maximum width | p. 37) 55 |
| 55 | (54) | Shaft of aedeagus with subapical processes each produced posteriorly and dorsally into a | 55 |
| 00 | | short, acute spine (Fig. 223) marshalli sp. n. (| n 73) |
| _ | | Shaft of aedeagus with subapical processes not as above | 56 |
| 56 | (55) | Shaft of aedeagus in dorsal aspect with subapical processes broadly rounded | 59 |
| - | | Shaft of aedeagus with apices of subapical processes transverse, lateral angles acute | 57 |
| 57 | (56) | Shaft of aedeagus with apices of subapical processes finely serrated (Fig. 225) | |
| | | fasciata Metcalf (| p. 65) |
| 50 | (57) | Shaft of aedeagus with subapical processes not as above | 58 |
| 20 | (57) | Paramere with interlocking surfaces closely opposed, truncate (Fig. 445) | 20) |
| | | Paramere with interlocking surfaces acute, spine-like (Fig. 447) diana sp. n. (j | |
| 59 | (56) | Paramere with interlocking surfaces acute, spine-like (Fig. 447) diana sp. n. (j Shaft of aedeagus with subapical processes extending anteriorly for two-fifths length | p. 43) |
| | (00) | (Fig. 228) albipennis Westwood (| n 38) |
| - | | Shaft of aedeagus with subapical processes extending anteriorly for approximately | r) |
| | | one-quarter length | 60 |
| 60 | (59) | Shaft of aedeagus with subapical processes each bearing a large, rounded, medially | |
| | | directed lobe antero-dorsally (Fig. 229) bella sp. n. (| p. 71) |
| - | (40) | Shaft of aedeagus with subapical processes simple (Fig. 230) neonebulosa Muir (j | |
| 01 | (49) | Shaft of aedeagus with all subapical dorsal, processes slender, spine-like | 62 |
| 62 | (61) | Shaft of aedeagus with some or all subapical dorsal processes broad, flap-like | 66 |
| -02 | (01) | Shaft of aedeagus with three pairs of subapical processes Shaft of aedeagus with two pairs of subapical processes | 63 64 |
| | | | UT |

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| 63 (62) | Shaft of aedeagus with medial pair of subapical processes very long and slender (Fig. |
| - | 231)nigrithorax sp. n. (p. 63) Shaft of aedeagus with medial pair of subapical processes short (Fig. 232) lucifera sp. n. (p. 35) |
| 64 (62) | Paramere with dorsal margin narrowly produced towards midline apically (Fig. 453) infedelis sp. n. (p. 51) |
| 65 (64) | Paramere with apex regularly rounded |
| - | 234) |
| 66 (61) | Shaft of aedeagus with five pairs of subapical processes (Fig. 236) <i>caliginosa</i> Walker (p. 23) Shaft of aedeagus with two pairs of subapical processes |
| 67 (66) | Shaft of aedeagus with medial subapical process slender, longitudinally aligned, bearing numerous, very small, acute tubercules anteriorly and/or dorsally, lateral processes spine-like |
| 68 (67) | Shaft of aedeagus with medial subapical process lacking tubercules |
| - | <i>calypso</i> sp. n. (p. 44) Shaft of aedeagus with subapical processes short, apically acute |
| 69 (68) - | medial processes (Fig. 238) |
| 70 (67) | medial processes (Fig. 239) |
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| | | spine-like projection basally (Fig. 252) hengist sp. n. (p. 67) Shaft of aedeagus with subapical processes basally unarmed (Fig. 253). musica sp. n. (p. 32) |
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| | | (Fig. 370) tikalme sp. n. (p. 34) |
| - | (01) | Shaft of aedeagus with tooth-like projections of equal size |
| 92 | (91) | Shaft of aedeagus in dorsal aspect strongly tapering from base to apex (Fig. 260) |
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| | | processes (Fig. 263) fuscomaculata sp. n. (p. 59) |
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| | | acutely angled, flap-like processes adjacent to midline (Fig. 264) <i>lloydi</i> sp. n. (p. 58) |
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| - | () | Shaft of aedeagus in dorsal aspect with length greater than two and one-half times |
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| 97 | (96) | Paramere with basal interlocking surface very large, distal surface obsolete (Fig. 486) |
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| 98 | (97) | Paramere with dorsal process very small (Fig. 487). Shaft of aedeagus with apices of |
| | . , | subapical processes slender, dorsally directed (Fig. 377) <i>nebulosa</i> (Germar) (p. 56) |
| | | neoulosa (Cerman) (p. 56) |
| - | | Paramere with dorsal process large (Fig. 488). Shaft of aedeagus with apices of subapical processes broad, anteriorly directed (Fig. 378) |

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| 99 (96) | Paramere with dorsal surface subapically produced into a rounded, medially directed secondary process bearing numerous robust spines |
| - | Paramere lacking a distinct subapical secondary process |
| 100 (99) - | Shaft of aedeagus with subapical processes simple, triangular (Fig. 268) flavilla sp. n. (p. 29) Shaft of aedeagus with subapical processes rounded, each bearing a long, slender, antero-ventrally directed, spine-like projection at midlength on anterior margin (Fig. |
| | 269) unimaculata sp. n. (p. 28) |
| 101(100) | Shaft of aedeagus with subapical processes long, slender, spine-like, dorsally or anterior- ly directed |
| - | Shaft of aedeagus with subapical processes broad or, if slender, ventrally directed 105 |
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| 103(102) | Paramere with dorsal process situated at midlength (Fig. 492) distincta sp. n. (p. 66) |
| - | Paramere with dorsal process situated somewhat distad of midlength |
| 104(103) | Shaft of aedeagus with subapical processes strongly diverging (Fig. 272). Paramere with interlocking surfaces truncate, distant from each other (Fig. 493) whimperi sp. n. (p. 62) |
| - | Shaft of aedeagus with subapical processes weakly diverging (Fig. 273). Paramere with |
| | interlocking surfaces acute, closely opposed (Fig. 494) testacea (Fabricius) (p. 57) |
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| 10/(100) | directed, spine-like projection basally (Fig. 276) mylesi sp. n. (p. 33) |
| - | Shaft of aedeagus lacking slender projections |
| 108(107) | Shaft of aedeagus with subapical processes deeply notched apically (Fig. 277) |
| | henrietta sp. n. (p. 49) |
| - | Shaft of aedeagus with subapical processes apically acute (Fig. 279) albicans (Stål) (p. 50) |

Mysidia asinella sp. n.

Female: head 0.97 mm long, 1.12 mm wide; pronotum 2.52 mm wide; tegmen 12.00–12.50 mm long; wing 7.05 mm long. Male unknown.

Length of from 5 times width at apex, c. 2.5 times width at base; ocelli small, distinct; clypeus c. as long as frons; rostrum terminating immediately posterior to hind coxae. Pronotal width 18 times mid-dorsal length; fronto-lateral surfaces weakly carinate; tegula not carinate.

Head bright scarlet, antenna yellow. Pronotum with mid-dorsal and fronto-lateral surfaces scarlet; scutellum scarlet; disc of mesonotum brown; abdomen brownish dorsally, tinged scarlet apically. Tegmen and wing dark brownish, veins brown, posterior margins very narrowly scarlet. Tegmen unmarked, base narrowly scarlet; costal vein and branches, and apical part of subcostal vein and its branches reddish; radial-subcostal cross-vein, medial-radial apical cross-vein, and bases of fifth and sixth branches of medial vein white. Wing with a narrow, oblique, transverse, whitish band extending from costal to posterior margins immediately distad of radial-medial cross-vein; otherwise unmarked.

MATERIAL EXAMINED

Holotype Q, **Brazil**: Belem, Para, vi.1924 (*Williams*) (BMNH). Paratypes, **Brazil**: 4 Q, Breves, Lower Amazon (INPA; BMNH).

In the absence of males, *asinella* is readily distinguished by the bright scarlet pigmentation of the head and thorax, and by the single pale band on the otherwise dark brownish wing.

Mysidia adusta sp. n.

(Figs 217, 328, 437)

Male: head 0.67 mm long, 1.03 mm wide; pronotum 2.37 mm wide; tegmen 9.80 mm long; wing 5.90 mm long. Female: tegmen 11.70 mm long.

Length of frons c. 4.5 times width at apex, c. 3 times width at base; ocelli large, prominent; clypeus as long as frons; rostrum terminating immediately posterior to hind coxae. Pronotal width 14 times length at mid-dorsal line; fronto-lateral surfaces and tegula not carinate.

Head, excluding antenna, rostrum, and extreme baso-ventral margins usually scarlet; ocelli concolorous. Fronto-lateral surfaces of pronotum each with a broad, scarlet band extending horizontally from adjacent to dorsal margin of eye to lateral margin; tegula and disc of mesonotum pale brownish; scutellum irregularly tinged dull pink. Tegmen and wing dark smoky brown; veins and cross-veins dark brown; lacking prominent markings. Tegmen with veins over basal third narrowly edged yellowish hyaline; apical forks of medial vein, second radial-medial cross-vein, and radial-subcostal cross-vein white; costal and posterior marginal veins very narrowly crimson. Wing unmarked; posterior marginal vein narrowly crimson.

Shaft of aedeagus broad; apex with a pair of opposed, flap-like processes extending from ventral surface; dorso-lateral surfaces subapically each with a long, slender, spine-like process; ventral surface subapically with two pairs of small, transversally aligned spines. Paramere with apex very broadly rounded; dorsal process situated at three-quarters length, large, strongly produced posteriorly. Subgenital plate produced medially into a rounded, posteriorly directed, lobe bearing a fringe of long, erect, spine-like hairs.

MATERIAL EXAMINED

Holotype J, Brazil: Amazonas, 120 km E. of Tapuruquara, 19.i.1978 (*Penny*) (INPA). Paratype. Brazil: 1 Q, Amazonas, Manaus (BMNH).

M. adusta is readily distinguished by the pigmentation of the head and thorax, and the dark brown tegmen and wing, both lacking transverse markings.

Mysidia polyhymnia sp. n.

(Figs 196, 306, 415)

Male: head 0.61 mm long, 0.86 mm wide; pronotum 1.97 mm wide; tegmen 9.00 mm long; wing 5.10 mm long. Female unknown.

Length of frons c. 5 times width at apex, 2.33 times width at base; ocelli small, not prominent; clypeus c. 0.33 longer than frons; rostrum extending to base of subgenital plate. Pronotal width c. 13 times mid-dorsal length, fronto-lateral surfaces and tegula distinctly carinate.

Fronto-lateral surfaces of pronotum dorsal to upper margins of eyes brownish; tegula dark brown; dorsal surface of abdomen tinged red basally. Tegmen and wing smoky brownish, veins dark brown. Tegmen with cross-veins pale, apical fork of medial vein surrounded by a very small white spot, costal margin basally dark brown. Wing unmarked.

Shaft of aedeagus slender in lateral aspect, greatly expanded laterally; dorsal surface at approximately two-thirds length with a pair of large processes, each terminating posteriorly in a long, slender, curving spine, and anteriorly in a shorter, straighter spine. Paramere very robust; apex very obtusely rounded, almost truncate; dorsal process situated at three-fifths length, reduced, proximal component slender, inclined antero-dorsally and terminating in a medially directed hook, distal component short and rounded.

MATERIAL EXAMINED

Holotype O, Brazil: Amazon, Fonteboa (BMNH).

The pigmentation of the tegmen and wing is closely similar to that of *caliginosa* and *inquinata*, but *polyhymnia* is distinguished by its larger size, relatively obscure ocelli, carinate tegula, and by the structure of the male genitalia.

Mysidia caliginosa Walker

(Figs 236, 348, 456, 463)

Mysidia caliginosa Walker, 1858: 98. Holotype Q, BRAZIL (BMNH) [examined]. Mysidia rubra Metcalf, 1945: 128. Holotype O', GUYANA (AMNH) [examined]. Syn. n.

Male: head 0.60 mm long, 0.80 mm wide; pronotum 1.60 mm wide; tegmen 7.00–7.65 mm long; wing 4.50 mm long. Female: tegmen 7.20–9.80 mm long.

Length of frons c. 5 times width at apex, 2.5 times width at base; ocelli very large and prominent; clypeus slightly longer than frons; rostrum terminating immediately posterior to hind coxae. Pronotal width from 10–12 times mid-dorsal length; fronto-lateral surfaces and tegula with carinae weak or obsolete.

Frons and genae dorsally scarlet; ocelli yellow, broadly edged scarlet. Dorsal surfaces of thorax and abdomen from pale brown to deep reddish brown, usually scarlet, abdomen rarely blackish; tegula with dorsal margin broadly dark brown. Tegmen and wing dark brownish, unmarked; veins and cross-veins dark brown; posterior marginal veins very narrowly crimson. Tegmen with costal, subcostal and radial veins frequently tinged crimson.

Shaft of aedeagus cylindrical; dorsal surface subapically with a pair of large, flap-like processes, each terminating in a slender, curving spine; lateral surfaces each with four slender spine-like processes. Paramere slender; apex narrowly rounded; dorsal process well developed, situated somewhat distad of mid-length, apex weakly produced posteriorly; dorsal surface subasally with a group of short robust spines.

MATERIAL EXAMINED

Holotype \mathcal{Q} (*caliginosa*), **Brazil**: Santarem (*Bates*) (BMNH). Holotype \mathcal{O} (*rubra*), **Guyana**: Kartabo, Bartica District, 1920 (AMNH).

Guyana: 1 \bigcirc , 2 \bigcirc (BMNH). Brazil: 1 \bigcirc , Santarem (*Bates*) (BMNH); 2 \bigcirc (BMNH). Bolivia: 1 \bigcirc (BMNH). Colombia: 1 \bigcirc (BMNH). Ecuador: 2 \bigcirc , 2 \bigcirc (BMNH). Panama: 1 \bigcirc (FAMU). Peru: 1 \bigcirc (FAMU). Surinam: 1 \bigcirc (FAMU). Trinidad: 1 \bigcirc (BMNH).

The holotype of *rubra* Metcalf has the tegmina and wings damaged or missing; the genitalia are preserved in balsam and are not accessible for detailed study.

This species is readily distinguished by the dark brown, unmarked, tegmen and wing, the pigmentation of the head and body, and by the structure of the male genitalia.

Mysidia inquinata sp. n.

(Figs 243, 354, 464)

Male: head 0.62 mm long, 0.67 mm wide; pronotum 1.47 mm wide; tegmen 7.22–7.25 mm long; wing 4.34 mm long. Female: tegmen 8.70 mm long.

Length of frons c. 6 times width at apex, c. 3 times width at base; ocelli very large and prominent; clypeus slightly longer than frons; rostrum terminating immediately posterior to hind coxae. Pronotal width 14 times mid-dorsal length; fronto-lateral surfaces and tegula with carinae weak or obsolete.

Frons and genae anterior to eyes usually tinged deep crimson; lateral surfaces of clypeus weakly tinged crimson. Fronto-lateral surfaces of pronotum dorsad to level of eyes often suffused reddish; tegula reddish, dorsal margins dark reddish brown; disc of mesonotum reddish brown; dorsal surface of abdomen occasionally dark brown. Tegmen and wing uniformly dark brownish, unmarked; veins and cross-veins dark brown; posterior margins often very narrowly crimson. Tegmen with apical branches of subcostal and radial veins bright crimson or white.

Shaft of aedeagus cylindrical; dorsal surface subapically with a pair of large, flap-like processes, each bearing a long spine subbasally on dorsal surface, and numerous very small and blunt spines on internal and ventral surfaces; lateral surfaces each with a long, apically serrated, process subapically. Paramere slender; apex broadly rounded; dorsal process situated at three-fifths length, apex strongly produced posteriorly; dorsal surface at one-quarter length with a rounded, internally directed secondary process bearing numerous short, robust spines.

MATERIAL EXAMINED

Holotype ♂, **Brazil**: Amazon, Fonteboa (BMNH). Paratypes. **Brazil**: 14 ♂, 11 ♀, Amazonas (BMNH; INPA).

The tegminal and wing pigmentation of *inquinata* is very similar to that of *caliginosa* and *polyhymnia*, but it differs from the former in the proportions and pigmentation of the head and pronotum, and from the latter by its much smaller size, and from both in the structure of the male genitalia.

Mysidia venusta sp. n.

(Figs 183, 293, 402)

Male: head 0.55 mm long, 0.69 mm wide; pronotum 1.47 mm wide; tegmen 6.20 mm long; wing 3.40 mm long. Female unknown.

Length of frons 4 times width at apex, 2.66 times width at base; ocelli small, indistinct; clypeus as long as frons; rostrum extending to posterior surface of hind coxae. Pronotal width slightly less than 12 times length at mid-dorsal line; fronto-lateral carinae prominent; tegula not carinate.

Head and body unmarked. Tegmen and wing whitish hyaline; veins pale yellow, otherwise totally devoid of pigmentation.

Shaft of aedeagus basally slender, broadly expanded subapically; dorsal surface subapically with a pair of large, apically shallowly bifurcate processes; a pair of rounded, flap-like processes; at midline, a single, apically shallowly concave, flap-like process. Paramere with ventral margin somewhat dorsally produced apically; dorsal process very reduced, situated at approximately midlength, not at all produced dorsally or posteriorly; dorsal surface at one-third length with a simple hook-like process, basally with a rounded lobe bearing numerous robust spines; ventral surface basally produced into a small rounded lobe bearing numerous robust spines.

MATERIAL EXAMINED

Holotype O', Brazil: Amazon, Rio Autaz, x (Roman) (NR).

The male genitalia bear a close resemblance to those of *cheesemani*, but *venusta* is readily distinguished by the complete absence of tegminal and wing pigmentation.

Mysidia richardsi sp. n.

(Figs 219, 331, 439)

Male: head 0.73 mm long, 0.90 mm wide; pronotum 2.10 mm wide; tegmen 8.92 mm long; wing 5.20 mm long. Female unknown.

Length of frons 6.5 times width at apex, c. 2.5 times width at base; ocelli obsolete; clypeus as long as frons; rostrum terminating immediately posterior to hind coxae. Pronotal width 20 times mid-dorsal length; fronto-lateral surfaces and tegulae with carinae obsolete or absent.

Head and body unmarked. Tegmen and wing whitish hyaline, veins and cross-veins pale brownish yellow. Tegmen with costal cell pale smoky yellow; posterior margin very pale yellowish brown. Wing with posterior margin very narrowly and faintly yellowish.

Shaft of aedeagus with dorsal surface subapically bearing a pair of large flap-like lobes extending anteriorly to midlength, each with a small lateral spine at *c*. midlength; ventral surface at midlength with an antero-ventrally directed, apically rounded process at each lateral angle. Paramere slender, apex narrowly rounded; dorsal process situated slightly basad of midlength, posteriorly produced, with a large, rounded, medially directed process on internal surface at three-quarters length.

MATERIAL EXAMINED

Holotype O', Guyana: Blairmont, ix.1923 (Williams) (BMNH).

This species is distinguished by the lack of distinct markings on the head, body, tegmen and wing, and by the structure of the male genitalia.

Mysidia limpida sp. n.

(Figs 197, 307, 416)

Male: head 0.63 mm long, 0.88 mm wide; pronotum 1.87 mm wide; tegmen 8.33–8.80 mm long; wing 4.75 mm long. Female unknown.

Length of frons 5 times width at apex, twice width at base; ocelli small, obscure; clypeus one-third longer than frons; rostrum extending beyond hind coxae. Pronotal width 30 times mid-dorsal length; frontolateral surfaces not carinate; tegula distinctly carinate.

Head and body unmarked. Tegmen and wing whitish hyaline basally, weakly tinged yellowish from midlength, veins yellow. Tegmen with posterior and apical margins, cross-veins and branches of veins broadly edged pale fuscous, the last coalescing at midlength to form a very indistinct, pale, transverse band. Wing unmarked.

Shaft of aedeagus very broad in dorsal aspect; apex transverse, flap-like, strongly produced dorsally; lateral surfaces subapically each with a very large, rounded, dorsally directed, flap-like process; dorsal surface subapically with a pair of very large, flap-like processes medially, apex of each with posterior angle produced into a long spine. Paramere robust, apex irregularly rounded; dorsal process situated somewhat distad of midlength, small, apex not produced posteriorly.

MATERIAL EXAMINED

Holotype O, **Brazil**: Mato Grosso, 12°50′S 51°47′W, cerradão, 2.iii.1968 (*Richards*) (BMNH). Paratype. **Brazil**: 1 O, Para, Belem (BMNH). This species appears closely related to *amarantha* and *nitida*, but differs in the detailed structure of the male genitalia and in the pigmentation of the tegmen and wing.

Mysidia robusta sp. n.

(Fig 501)

Male: head 0.84 mm long, 1.20 mm wide; pronotum 3.02 mm wide; tegmen 13.60 mm long; wing 8.50 mm long. Female unknown.

Length of frons 5 times width at apex, 2.33 times width at base; ocelli small, distinct; clypeus slightly longer than frons; rostrum terminating slightly posterior to hind coxae. Pronotal width c. 10 times mid-dorsal length; fronto-lateral surfaces and tegula not distinctly carinate.

Head and thorax tinged reddish on dorsal surfaces, ocelli crimson. Tegmen and wing hyaline; veins yellowish brown; posterior margins crimson, narrowly edged smoky brown. Tegmen with medial, cubital and anal veins basally dark brown. Wing unmarked.

Shaft of aedeagus broad, robust; dorsal surface subapically with a pair of large, flap-like processes adjacent to midline and extending over apex onto ventral surface. Paramere robust; apex broadly rounded; dorsal process situated at approximately two-thirds length, large, posteriorly produced; dorsal surface subbasally produced towards midline. Subgenital plate produced medially into a pair of short, broad lobes covered in very small obtuse spines.

MATERIAL EXAMINED

Holotype O, Brazil: Amazon, Fonteboa (BMNH).

Amongst the largest species of the genus, *robusta* is readily distinguished by the yellowish hyaline pigmentation of the otherwise unmarked tegmen and wing.

Mysidia nitida sp. n.

(Figs 198, 308, 417)

Male: head $0.62 \text{ mm} \log 0.94 \text{ mm}$ wide; pronotum 2.00 mm wide; tegmen $10.20 \text{ mm} \log 5.85 \text{ mm} \log 5.85 \text{ mm}$.

Length of frons 6.25 times width at apex, 2.5 times width at base; ocelli small, obscure; clypeus slightly longer than frons; rostrum extending to base of subgenital plate. Pronotal width 24 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Head and body unmarked. Tegmen and wing whitish hyaline, veins pale yellowish. Tegmen with posterior margin weakly tinged smoky brown; with a very indistinct, smoky brown, transverse band at level of first fork of cubital vein, and a very faint, intermittent, brownish, transverse band at level of medial-cubital cross-vein. Wing with posterior margin very weakly tinged smoky brown, otherwise unmarked.

Shaft of aedeagus slender in lateral aspect, broadly expanded laterally; dorsal surface subapically with a pair of large, flap-like processes, each bearing a large spine on postero-dorsal surface. Paramere very robust; apex obtusely rounded; dorsal process directed towards midline, not produced posteriorly.

MATERIAL EXAMINED

Holotype O^{*}, Guyana: Amazon-Courantyne Divide, head of Oronoque River, 1937 (Beddington) (BMNH).

The male genitalia show a similarity with those of *amarantha*, but the external characters are distinct.

Mysidia amazona sp. n.

(Figs 186, 296, 405)

Male: head $0.76 \text{ mm} \log_1 1.10 \text{ mm}$ wide; pronotum 2.40 mm wide; tegmen $10.04-11.05 \text{ mm} \log_3$; wing $6.00 \text{ mm} \log_2$. Female unknown.

Length of frons 6 times width at apex, c. 2-5 times width at base; ocelli small, distinct; clypeus one-sixth longer than frons; rostrum extending to base of subgenital plate. Pronotal width 19 times mid-dorsal length; fronto-lateral surfaces not distinctly carinate; tegula with carinae distinct.

Head and body dark brownish, unmarked. Tegmen and wing hyaline, veins yellow. Tegmen with costal and subcostal areas pale brownish. Wing unmarked.

Shaft of aedeagus very broad in dorsal aspect; apex recurving; lateral surfaces each with a very large, flap-like process extending over dorsal surface and overlapping at midline, each with anterior margin produced dorsally into a slender secondary process with apical angles produced into acute spines. Paramere very robust, broadly rounded, apex obtuse; dorsal margin strongly curved medially and ventrally, considerably expanded from mid-length to apex; dorsal process very small, situated at two-fifths length, apex not produced.

MATERIAL EXAMINED

Holotype O^{*}, **Brazil**: Amazon, Rio Autaz, 31.x.1914 (*Roman*) (NR). Paratype. 1 O^{*}, same data as holotype (BMNH).

This species is readily distinguished by its large size, lack of pigmentation, and by the structure of the male genitalia.

Mysidia punctum (Fabricius)

(Figs 248, 359, 469)

Derbe punctum Fabricius, 1803: 82. LECTOTYPE Q, CENTRAL AMERICA (ZM), here designated [examined].

Mysidia punctum (Fabricius) Westwood, 1840: 83.

Mysidia steinbachi Distant, 1907: 396. LECTOTYPE O^{*}, BOLIVIA (BMNH), here designated [examined]. Syn. n.

Male: head $0.55 \text{ mm} \log 0.76 \text{ mm}$ wide; pronotum 1.60 mm wide; tegmen $7.50-8.00 \text{ mm} \log$; wing $4.52 \text{ mm} \log$. Female: tegmen $8.50-10.20 \text{ mm} \log$.

Length of frons slightly less than 8 times width at apex, 3 times width at base; ocelli small, indistinct; clypeus c. as long as frons; rostrum terminating immediately posterior to hind coxae. Pronotal width 15–20 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Head and body unmarked. Tegmen and wing whitish hyaline, veins pale brown, cross-veins weakly edged yellowish brown. Tegmen with a prominent dark brown/black spot at one-third length, extending from costal margin almost to second branch of cubital vein, a very indistinct, irregular, pale smoky brown, transverse band at midlength extending from costal margin over one-half width. Wing with cross-veins weakly brownish; costal margin with a pale brown spot at one-third length.

Shaft of aedeagus very greatly expanded dorso-ventrally and laterally over apical half; dorsal surface subapically with a pair of flap-like processes, each bearing a spine-like projection; ventral surface subapically with a pair of broad apically truncate processes. Paramere massive, tapering from midlength to acutely rounded apex; dorsal process situated at one-quarter length; dorsal surface at midlength with a large, flap-like, roughly rectangular secondary process.

MATERIAL EXAMINED

Lectotype \mathcal{Q} (punctum), Central America (Schmidt) (ZM). Lectotype \mathcal{O}^* (steinbachi), Bolivia: 1904 (Steinbach) (BMNH) (badly damaged).

Trinidad: $1 \circ$, St George (BMNH). **Peru**: $2 \circ$, Callanga (BMNH). **Bolivia**: $1 \circ$, San Antonio (BMNH). **Guyana**: $3 \circ$, Bartica (BMNH). **Brazil**: $1 \circ$ (NR). **Central America**: $1 \circ$ (paralectotype of *punctum*) (ZM) (head missing).

This species is readily distinguished by the prominent dark brown spot on the costal area of the tegmen.

Mysidia immaculata sp. n.

Female: head 0.80 mm long, 1.25 mm wide; pronotum 2.90 mm wide; tegmen 14.80 mm long; wing 10.00 mm long. Male unknown.

Length of frons slightly greater than 5 times width at apex, 2.5 times width at base; ocelli obsolete; clypeus slightly longer than frons; rostrum terminating at level of hind coxae. Pronotal width 17 times mid-dorsal length; fronto-lateral surfaces and tegula prominently carinate.

Dorsal surfaces of head and thorax brownish; genae adjacent to eyes and fronto-lateral surfaces of pronotum at level of eyes reddish; abdomen dorsally with a small red spot on either side of midline on segments five and six, ventral surface and lateral margins reddish basally; median and posterior femora subapically tinged reddish. Tegmen and wing whitish hyaline, veins pale yellow. Tegmen with apical margin very narrowly reddish brown. Wing unmarked.

MATERIAL EXAMINED

Holotype Q, **Peru**: Callanga (BMNH).

One of the largest species of the genus, *immaculata* is distinguished by the lack of pigmentation of the tegmen and wing, and by the reddish pigmentation of the head and body.

Mysidia hyalina sp. n.

(Figs 226, 337, 445)

Male: head 0.55 mm long, 0.82 wide; pronotum 1.66 mm wide; tegmen 8.68–8.48 mm long; wing 5.40 mm long. Female unknown.

Length of frons 6 times width at apex, twice width at base; ocelli very small, distinct; clypeus slightly longer than frons; rostrum terminating at level of hind coxae. Pronotal width 13 times mid-dorsal length, fronto-lateral surfaces without carinae; tegula basally carinate.

Vertex deep red; genae level with midline of eyes dark brown; fronto-lateral surfaces of pronotum each with a broad, horizontal, orange band extending from adjacent to eye to lateral margin; tegula with ventral margin dull brown. Tegmen and wing hyaline, veins yellowish. Tegmen with cross-veins and forks of veins pale brown; apical fork of medial vein narrowly dark brown; claval margin with a small brown spot at level of point of fusion of anal veins, a small brown apot adjacent to claval suture at level of first fork of medial vein. Wing with a small pale brown spot adjacent to claval suture at midlength; radial-medial cross-vein brown.

Shaft of aedeagus very slender; dorsal surface subapically with a pair of large flap-like processes. Paramere very robust; apex obtusely rounded; dorsal process situated at one-third length, small, apex strongly produced posteriorly; dorsal surface subbasally produced, bearing numerous, long, robust spines.

MATERIAL EXAMINED

Holotype O^{*}, **Jamaica**: Moneague, ii.1904 (*Walsingham*) (BMNH). Paratype. 1 O^{*}, same data as holotype (BMNH).

This species is readily distinguished by the pigmentation of the head and pronotum, the relative lack of pigmentation of the tegmen and wing, and by the structure of the male genitalia.

Mysidia unimaculata sp. n.

(Figs 269, 380, 490)

Male: head 0.50 mm long, 0.66 mm wide; pronotum 1.28 mm wide; tegmen 6.12 mm long; wing 3.65 mm long. Female unknown.

Length of frons 6.5 times width at apex, twice width at base; ocelli distinct; clypeus c. as long as frons; rostrum terminating immediately posterior to hind coxae. Pronotal width 15 times mid-dorsal length, fronto-lateral carinae distinct; tegulae weakly carinate.

Head and body unmarked; disc of mesonotum with lateral angles brown. Tegmen and wing whitish hyaline. Tegmen with a prominent brown spot between apex of clavus and first branch of cubital vein, otherwise unmarked. Wing with a large brown spot between clavus and cubital vein at midlength, otherwise unmarked.

Shaft of aedeagus slender, slightly expanded apically; dorsal surface subapically with a pair of large, broadly rounded, flap-like processes, each bearing a long tapering spine near base on anterior surface. Paramere very slender basally, broadening towards apex; dorsal process situated slightly distad of mid-length, very large, not greatly produced; dorsal surface at one-quarter length with a short rounded secondary process bearing numerous robust spines.

MATERIAL EXAMINED

Holotype O', Brazil: Para, Jabaty, v.1924 (Williams) (BMNH).

This species is readily distinguished by the unique pigmentation of the tegmen and wing, and by the structure of the male genitalia.

Mysidia athena sp. n.

(Figs 214, 324, 433)

Male: head 0.69 mm long, 0.96 mm wide; pronotum 1.90 mm wide; tegmen 9.77–10.00 mm long; wing 6.40 mm long. Female unknown.

Length of frons c. 5 times width at apex, 2.5 times width at base; ocelli obsolete; clypeus c. as long as frons; rostrum terminating at level of hind coxae. Pronotal width 15 times mid-dorsal length, fronto-lateral carinae distinct; tegulae with carinae obsolete or absent.

Genae each with a small dark brown spot adjacent to dorsal margin of eye, occasionally extending onto frons, with a similar marking level with mid-line of eye; antenna deep red; lateral surfaces of paraclypeus deep red; fronto-lateral surfaces of pronotum each with a deep red horizontal band extending from adjacent to eye to lateral margin; apices of anterior and medial coxae broadly deep red. Tegmen and wing whitish hyaline, veins and cross-veins yellowish. Tegmen with a small dark brown spot on costal cell adjacent to first fork of radial vein; clavus with a larger dark brown spot at apex, and a smaller spot at level of point of fusion of anal veins. Wing with a dark brown spot on first branch of cubital vein at midlength; posterior margin with a single, semi-circular, dark brown spot between each branch of anal, claval and medial veins.

Shaft of aedeagus slender, cylindrical, asymmetrical; dorsal surface apically with a large, twisted, flap-like process terminating anteriorly in a blunt point; left dorso-lateral surface subapically with a large triangular process; right lateral surface subapically with a large flap-like process terminating posteriorly in an acute spine-like lobe. Paramere very large; apex acute, strongly produced dorsally; dorsal process well developed, situated at midlength, apex postero-dorsally directed.

MATERIAL EXAMINED

Holotype ♂, **Ecuador**: Cachabé, i.1897 (*Rosenberg*) (BMNH). Paratype. 1 ♂, same data as holotype (BMNH).

The tegminal and wing pigmentation of this species closely resembles that of *acidaloides*, but the prominent markings of the head and thorax, and the structure of the male genitalia, render it readily distinguishable.

Mysidia flavilla sp. n.

(Figs 268, 379, 489)

Male: head $0.42 \text{ mm} \log_{10} 0.65 \text{ mm}$ wide; pronotum 1.40 mm wide; tegmen $6.12-6.38 \text{ mm} \log_{10}$; wing $3.65 \text{ mm} \log_{10}$ Female unknown.

Length of frons 7.5 times width at apex, c. 1.5 times width at base; ocelli small, obscure; rostrum extending to anterior surface of hind coxae. Pronotal width 13 times mid-dorsal length, fronto-lateral carinae very prominent; tegula weakly carinate.

Head and body unmarked. Tegmen and wing whitish hyaline, veins pale. Tegmen with a small dark brown spot adjacent to point of separation of fused medial and radial-subcostal veins, another at point of separation of fused radial and subcostal veins, a third at first fork of cubital vein, another on posterior margin at midlength of clavus, a fifth adjacent to medial vein at level of first fork of cubital vein, another adjacent to apex of clavus, and a seventh over apical fork of radial vein; cell between second and third branches of medial vein with a pale brown spot medially. Wing with a large dark brown spot adjacent to claval fold at midlength; cells of claval area and first cubital cell each with a dark brown spot on posterior margin.

Shaft of aedeagus broadly laterally expanded subapically; dorsal surface subapically with a pair of apically acute flap-like processes. Paramere broadest at midlength, apex narrowly rounded; dorsal process slightly distad of midlength, produced posteriorly; dorsal surface subbasally with a broad secondary process bearing numerous, large, robust spines.

MATERIAL EXAMINED

Holotype O^{*}, **Brazil**: Nictheroy, iv.1924 (*Williams*) (BMNH). Paratypes. **Brazil**: 1 O^{*}, Nictheroy; 1 O^{*}, Rezende (BMNH).

This species is distinguished by the intricate pattern of small dark spots on the tegmen and wing, and by the structure of the male genitalia.

Mysidia acidalioides Fowler

(Figs 7, 15, 33, 216, 326, 435)

Mysidia acidalioides Fowler, 1900: 72. LECTOTYPE Q, PANAMA (BMNH), here designated [examined].

Male: head $0.80 \text{ mm} \log_1 1.10 \text{ mm}$ wide; pronotum 2.30 mm wide; tegmen $11.00 \text{ mm} \log_3 7.30 \text{ mm} \log_2 1.10 \text{$

Length of frons c. 4.5 times width at apex, c. twice width at base; ocelli obsolete; clypeus c. as long as frons; rostrum terminating at level of anterior surface of hind coxae. Pronotal width c. 16 times mid-dorsal length, fronto-lateral carinae very prominent; tegulae distinctly carinate.

Vertex dark brown between carinae; frons with a broad, often broken, dark brown transverse band at level of midline of eyes; antenna often reddish; paraclypeus and lateral surfaces of anteclypeus red; fronto-lateral surfaces of pronotum each with a broad, deep red, horizontal band extending from level of midline of adjacent eye to just above ventral margin; fore and mid coxae bright red over apical half; hind femur reddish apically. Tegmen and wing whitish hyaline, veins pale yellow. Tegmen with a small brown spot on costal cell at level of point of separation of fused subcostal and radial veins; clavus with a large, irregular, brown spot at apex, and a smaller spot on exterior margin adjacent to point of fusion of anal veins; posterior and apical margins narrowly and weakly brownish, somewhat darker between apical branches of medial and radial veins. Wing with a small, somewhat indistinct, brown marking between claval suture and midlength of first branch of cubital vein; posterior margin with a dark brown spot between each branch of anal, cubital and medial veins.

Shaft of aedeagus slender, cylindrical; dorsal surface subapically with a pair of triangular processes, each produced posteriorly into a slender, rounded, flap extending beyond apex of shaft; ventral surface apically produced into two pairs of large, acute, triangular processes. Paramere slender, broadest at three-fifths length, apex acutely rounded; dorsal process robust, situated at three-fifths length.

MATERIAL EXAMINED

Lectotype \mathcal{O}^* , **Panama**: V. de Chiriqui, 2500–4000 ft (*Champion*) (BMNH). **Panama**: 2 \mathcal{Q} (paralectotypes), same data as lectotype (BMNH); 5 \mathcal{O}^* , 6 \mathcal{Q} (USNM; FAMU; CAS). **Belize**: 1 \mathcal{Q} (FAMU).

The species here designated as lectotype bears Fowler's handwritten determination label and the BMNH 'type' label.

This species is readily distinguished by the very slight pigmentation of the tegmen and wing combined with the distinctive markings of the head and thorax; from *athena* it is separated by its larger size and the structure of the male genitalia.

Mysidia neoasinella sp. n.

(Figs 257, 368, 477)

Male: head $0.70 \text{ mm} \log_1 1.02 \text{ mm}$ wide; pronotum 2.10 mm wide; tegmen $9.70 \text{ mm} \log_3$; wing $6.00 \text{ mm} \log_2$. Female unknown.

Length of frons 6 times width at apex, c. three times width at base; ocelli very prominent; clypeus slightly longer than frons; rostrum terminating somewhat posterior to hind coxae. Pronotal width 12.5 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Ocelli crimson; dorsal and lateral surfaces of pronotum irregularly pale crimson; tegulae tinged orange, margins narrowly brownish; disc of mesonotum pale yellowish brown, darker between lateral carinae. Tegmen and wing dark smoky brown. Tegmen with veins narrowly edged hyaline from base to level of apex of claval area; with a very narrow and indistinct, hyaline, transverse band extending from costal margin at level of second fork of cubital vein to posterior margin at apex of clavus. Wing with costal cell narrowly hyaline basally; with a very narrow and indistinct, hyaline, transverse band at approximately two-thirds length extending from costal to posterior margins.

Shaft of aedeagus slender, cylindrical, slightly expanded laterally over apical third; lateral surfaces each with a large flap-like process produced antero-dorsally into a long, slightly curving spine. Paramere short, rounded; apex acute; dorsal process situated slightly distad of mid-length, strongly produced posteriorly; dorsal surface subbasally roundly produced, bearing numerous, short, robust, spines. Lateral margins of subgenital segment each produced into a single, long, broad, apically rounded, posteriorly directed lobe at midline.

MATERIAL EXAMINED

Holotype O, Brazil: Amazonas, P. das Laranjeiras, viii.-ix.1981 (Arias) (INPA).

This species is distinguished by the pigmentation of the thorax and the structure of the male genitalia.

Mysidia vista sp. n.

Female: head 0.63 mm long, 0.71 mm wide; pronotum 1.25 mm wide; tegmen 6.88–7.68 mm long; wing 3.85 mm long. Male unknown.

Length of frons 6.5 times width at apex, 3 times width at base; ocelli very large, prominent; clypeus as long as frons; rostrum extending almost to base of subgenital plate. Pronotal width 15 times mid-dorsal length; fronto-lateral carinae weak; tegula not carinate.

Genae anterior and dorsal to eyes orange. Pronotum with dorso-lateral margins and a large, circular spot adjacent to eye on each fronto-lateral surface orange; scutellum with baso-lateral angles tinged orange; abdomen posteriorly orange on mid-dorsal line. Tegmen and wing smoky brown, veins pale brown. Tegmen with a narrow, transverse, whitish band extending from costal margin to apex of clavus at one-third length, another, fainter band at one-fifth length; brown pigmentation gradually becoming fainter from base to apex. Wing with brown pigmentation weakening from base; posterior and apical margins clear whitish hyaline.

MATERIAL EXAMINED

Holotype Q, **Guyana**: Blairmont, x.1923 (*Williams*) (BMNH). Paratypes. **Guyana**: 1 Q, Blairmont; 1 Q, New Amsterdam (BMNH).

In the absence of males this species is most readily distinguished by the pigmentation of the thorax, tegmen and wing.

Mysidia albifasciata sp. n.

(Figs 239, 350, 459)

Male: head 0.59 mm long; 0.71 mm wide; pronotum 1.28 mm wide; tegmen 7.00 mm long; wing 3.70 mm long. Female: tegmen 7.40 mm long.

Length of frons 6 times width at apex, 3.5 times width at base; ocelli large, prominent; clypeus as long as frons; rostrum terminating immediately basad of subgenital plate. Pronotal width 15 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Ocelli occasionally deep red; pronotum with fronto-lateral surfaces tinged red adjacent to eyes; disc of mesonotum occasionally blackish brown. Tegmen smoky brown; veins pale brownish yellow, irregularly mottled white over basal quarter; a transverse, hyaline band extending from costal to posterior margins at one-third length, another at midlength, and a third at three-quarters; apex, beyond apical fork of medial vein, irregularly hyaline. Wing whitish hyaline with a pale, smoky brown, transverse band at mid-length; apical third pale brownish.

Shaft of aedeagus slender, cylindrical; dorsal surface subapically with a pair of broad, apically acute processes adjacent to midline bearing small obtuse spines; laterally, a pair of slender, spine-like processes. Paramere slender, apex narrowly rounded; dorsal process situated at two-thirds length, strongly produced dorsally and posteriorly; dorsal surface subbasally with a broad, rounded secondary process.

MATERIAL EXAMINED

Holotype ♂, Ecuador: Mera, 1–2.ii.1923 (*Williams*) (BMNH). Paratype. Ecuador: 1 ♀, Tena (BMNH).

This species is readily distinguished by the pigmentation of the tegmen and wing, and by the structure of the male genitalia.

Mysidia quadrifascia Walker

Mysidia quadrifascia Walker, 1858: 97. Holotype Q, BRAZIL (BMNH) [examined].

Female: head 0.66 mm long, 0.67 mm wide; pronotum 1.55 mm wide; tegmen 7.65 mm long, wing 4.25 mm long. Male unknown.

Length of frons c. 5 times width at apex, c. 3 times width at base; ocelli very prominent; clypeus slightly longer than frons; rostrum terminating level with midlength of abdomen. Pronotal width c. 11 times mid-dorsal length; fronto-lateral surfaces and tegula without distinct carinae.

Ocelli very dark crimson; disc of mesonotum brown. Tegmen and wing hyaline, veins and cross-veins pale brownish yellow. Tegmen pale smoky brown basally, with a smoky brown transverse band at level of first fork of cubital vein, a broader band at level of first and second forks of medial vein, and another at level of radial-medial cross-vein; apical margin very pale smoky brown. Wing with a very pale, irregular, smoky brown, transverse band at midlength; apical third pale smoky brown.

MATERIAL EXAMINED

Holotype \mathcal{Q} , **Brazil**: Santarem (*Bates*) (BMNH).

This species is distinguished by the prominent dark pigmentation of the tegmen and wing.

Mysidia transversa sp. n.

(Figs 234, 345, 454)

Male: head 0.62 mm long, 0.78 mm wide; pronotum 1.44 mm wide; tegmen 7.20 mm long; wing 3.85 mm long. Female unknown.

Length of frons 5 times width at apex, 3.33 times width at base; ocelli prominent; clypeus slightly longer than frons; rostrum terminating immediately basad of apex of subgenital plate. Pronotal width c. 14 times mid-dorsal length, fronto-lateral carinae absent; tegula with very weak carinae.

Ocelli scarlet; fronto-lateral surfaces of pronotum occasionally each with a scarlet spot adjacent to eye; disc of mesonotum and dorsal surface of abdomen dark brown. Tegmen and wing whitish hyaline, veins pale brownish. Tegmen with a broad, smoky brown, transverse band at one-eighth length, another at level of first fork of cubital vein, another, broader, band immediately distad of medial-cubital cross-vein, a fourth at approximately two-thirds length; apical area, distad of last fork of radial vein, broadly smoky brown. Wing smoky brown basally; with a broad smoky brown band extending obliquely from costal margin to posterior margin at midlength; apical quarter smoky brown.

Shaft of aedeagus cylindrical; dorsal surface subapically with two pairs of robust, anteriorly directed, spine-like processes. Paramere very slender basally, becoming abruptly expanded at midlength, apex obtusely rounded; dorsal process situated immediately distad of midlength, long, slender, apex strongly produced.

MATERIAL EXAMINED

Holotype ♂, **Peru**: Iquitos, Rio Chinchicuy 1.5 km, 27.xi.1972 (*Waldo*) (FAMU). Paratypes. **Peru**: 1 ♂ (BMNH). **Brazil**: 3 ♂, 1 ♀, Amazonas (INPA; BMNH).

Superficially this species resembles *quadrifascia*, but differs in the proportions of the head and pronotum and in the pigmentation of the tegmen.

Mysidia fulvodorsalis sp. n.

(Figs 177, 286, 395)

Male: head 0.63 mm long, 0.74 mm wide; pronotum 1.51 mm wide; tegmen 7.90–8.20 mm long; wing 4.25 mm long. Female: tegmen 8.00–8.40 mm long.

Length of frons c. 6 times width at apex, 3.33 times width at base; ocelli prominent; clypeus slightly longer than frons; rostrum extending to base of subgenital segment. Pronotal width 12 times mid-dorsal length, fronto-lateral carinae absent, tegula weakly carinate.

Ocelli crimson; disc of mesonotum brown. Tegmen and wing whitish hyaline. Tegmen with a broad, dark smoky brown, transverse band near base, another at level of first fork of cubital vein, another at midlength, a fourth at level of radial-medial cross-vein; apical area, distad of last fork of radial vein, dark smoky brown. Wing with a broad, transverse, smoky brown band extending from medial vein to posterior margin at midlength; apical third dark smoky brown.

Shaft of aedeagus somewhat laterally expanded subapically; dorsal surface subapically with a pair of long, spine-like processes laterally; a pair of long, slender, processes at midline. Paramere basally slender, becoming broadly expanded over distal half length, apex obtusely rounded; dorsal process situated at three-fifths length, apex slender; dorsal surface at one-fifth length with a small, conical, secondary process bearing numerous small spines; ventral surface at midlength with a rounded process bearing numerous long spines.

MATERIAL EXAMINED

Holotype \mathcal{O} , **Bolivia**: Cbb., Villa Tunari, 31.iii.1978 (*O'Brien*) (FAMU). Paratypes. 1 \mathcal{O} , 3 \mathcal{Q} , same data as holotype (FAMU; BMNH).

This species is distinguished by the pronotal and tegminal pigmentation, and by the structure of the male genitalia.

Mysidia musica sp. n.

(Figs 253, 364, 473)

Male: head 0.67 mm long, 0.95 mm wide; pronotum 1.80 mm wide; tegmen 8.40 mm long; wing 5.20 mm long. Female: tegmen 8.80 mm long.

Length of frons 5 times width at apex, 2.5 times width at base; ocelli large, prominent; clypeus c. as long

as frons; rostrum extending well beyond hind coxae. Pronotal width 20 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Genae and fronto-lateral surfaces of pronotum adjacent to eyes weakly pale orange; disc of mesonotum brownish. Tegmen and wing smoky brown. Tegmen with veins brownish; with a narrow, whitish, transverse band at one-fifth length, another at two-fifths; a third at three-fifths; an irregular, broken, band at approximately mid-length; posterior margin whitish from apex of first branch of cubital vein to fifth branch of medial vein; apical fork of radial vein irregularly pale. Wing pale, whitish hyaline, veins pale; with an irregular brownish, transverse band extending from costal margin to base of cubital vein; an irregular brownish band extending obliquely from medial-cubital cross-vein to posterior margin; a very faint band extending from radial-medial cross-vein almost to posterior margin.

Shaft of aedeagus broadly laterally expanded subapically; dorsal surface subapically with a pair of large, adpressed, overlapping, flap-like processes, each terminating anteriorly in a tapering spine near midline. Paramere massive, apex broadly rounded; dorsal process greatly reduced, situated at one-third length; dorsal surface at two-thirds length with a large, conical, secondary process.

MATERIAL EXAMINED

Holotype O^{*}, **Brazil**: Para, Jabaty, v.1924 (*Williams*) (BMNH). Paratype. 1 Q, same data as holotype (BMNH).

This species is distinguished by the pigmentation of the tegmen and wing.

Mysidia williamsi sp. n.

(Figs 238, 349, 458)

Male: head 0.52 mm long, 0.76 mm wide; pronotum 1.34 mm wide; tegmen 6.46 mm long; wing 3.60 mm long. Female: tegmen 6.40–7.00 mm long.

Length of from 5.5 times width at apex, 3 times width at base; ocelli very large and prominent; clypeus slightly longer than from; rostrum terminating slightly basad of subgenital plate. Pronotal width c. 14 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Dorsal surface of mesonotum and abdomen brownish. Tegmen and wing dark, smoky brown, veins brownish yellow. Tegmen with a narrow, whitish, transverse band extending from costal margin to claval suture at one-sixth length, another extending from costal margin to apex of clavus at one-third, another extending from costa to hind margin somewhat distad of mid-length; an irregular whitish area around apical fork of medial vein extending broadly to costal margin; apical area between first and fifth branches of medial vein hyaline. Wing with an irregular pale band running transversely from costal margin at level of radial-medial cross-vein, becoming broader and less distinct towards posterior margin at level of first two branches of cubital vein.

Shaft of aedeagus slender, cylindrical, slightly asymmetrical; dorsal surface subapically with a pair of long, flap-like processes bearing clusters of very small, tooth-like spines apically; dorso-lateral surfaces subapically each with a small, spine-like process. Paramere slender; dorsal process large, situated at two-thirds length, strongly produced dorsally and posteriorly; dorsal surface subbasally with a cluster of short, robust spines; ventral surface subbasally with several long, robust spines.

MATERIAL EXAMINED

Holotype Q, **Brazil**: Para, Jabaty, v.1924 (*Williams*) (BMNH). Paratypes. **Brazil**: 1 0^{*}, 4 Q, Amazonas (INPA; BMNH).

This species is readily distinguished by the pigmentation of the tegmen and wing, and by the structure of the male genitalia.

Mysidia mylesi sp. n.

(Figs 276, 387, 497)

Male: head 0.52 mm long, 0.69 mm wide; pronotum 1.20 mm wide; tegmen 5.60 mm long; wing 3.20 mm long. Female: tegmen 6.40 mm long.

Length of from 5.5 times width at apex, 3 times width at base; ocelli large, prominent; clypeus c. as long as frons; rostrum extending to base of subgenital segment. Pronotal width c. 12 times mid-dorsal length, fronto-lateral carinae absent; tegula with weak carinae.

Ocelli bright scarlet; fronto-lateral surfaces of pronotum adjacent to eyes pale reddish; abdomen with dorsal surface tinged reddish. Tegmen and wing whitish hyaline, veins pale brown. Tegmen with basal and

claval areas smoky brown, a smoky brown transverse band at level of first fork of cubital vein, another at midlength; apical third smoky brown, with anterior margin apically, and posterior margin between first and fifth branches of medial vein broadly pale. Wing pale smoky brown over basal half and apical third.

Shaft of aedeagus slender, cylindrical, slightly asymmetrical; dorsal surface subapically with two pairs of acutely pointed processes. Pramere slender; dorsal process situated slightly distad of midlength, apex strongly produced posteriorly.

MATERIAL EXAMINED

Holotype \bigcirc ^{*}, **Trinidad**: Caura, on *Parthenium* sp., 2.viii.1976 (*Noyes*) (BMNH). Paratype. 1 \bigcirc , same data as holotype (BMNH).

This species is readily distinguished by the pigmentation of the tegmen and wing, and by the relatively simple structure of the aedeagus.

Mysidia varia sp. n.

(Figs 261, 372, 482)

Male: head $0.65 \text{ mm} \log_{10} 10.5 \text{ mm}$ wide; pronotum 2.39 mm wide; tegmen $9.40-10.54 \text{ mm} \log_{10}$; wing $6.00 \text{ mm} \log_{10}$. Female: tegmen $10.20-11.40 \text{ mm} \log_{10}$.

Length of frons 5 times width at apex, 3.33 times width at base; ocelli obsolete; clypeus slightly longer than frons; rostrum extending beyond apex of subgenital plate. Pronotal width 11 times mid-dorsal length, fronto-lateral surfaces weakly carinate; tegula not carinate.

Head and pronotum often tinged pale orange. Tegmen smoky brown; veins dark brown, narrowly boardered whitish hyaline; central areas of cubital cells and larger medial cells irregularly whitish hyaline. Wing predominantly whitish hyaline, veins dark brown, cells irregularly smoky brown medially.

Shaft of aedeagus cylindrical, somewhat expanded apically; dorsal surface subapically with a pair of flap-like processes, each produced into two acute, spine-like processes dorsally. Paramere very long and slender; apex narrowly rounded; dorsal process situated somewhat distad of two-thirds length, little produced posteriorly; dorsal surface at one-fifth length with an obtusely rounded, secondary process.

MATERIAL EXAMINED

Holotype \bigcirc ^{*}, **Colombia**: Caqueta, Yuruyacu, 70 km SW. Florencia, 22.i.1979 (*Cooper*) (BMNH). Paratypes. **Colombia**: 1 \bigcirc ^{*}, same data as holotype (BMNH). **Guyana**: 1 \bigcirc ^{*}, Essequibo River (BMNH). **Ecuador**: 8 \bigcirc ^{*}, 6 \bigcirc , Tena (BMNH). **Brazil**: 1 \bigcirc ^{*}, Amazonas (INPA).

Though closely related to *tikalme*, *varia* may be distinguished readily by the pigmentation of the tegmen and wing, and by the detailed structure of the male genitalia.

Mysidia tikalme sp. n.

(Figs 259, 370, 480)

Male: head $0.63 \text{ mm} \log, 0.99 \text{ mm}$ wide; pronotum 2.30 mm wide; tegmen $11.00 \text{ mm} \log$; wing $6.30 \text{ mm} \log$. Female: tegmen $11.00-11.25 \text{ mm} \log$.

Length of frons c. 6 times width at apex, 4.5 times width at base; ocelli obsolete; clypeus as long as frons; rostrum extending beyond base of genital segment. Pronotal width c. 12 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Genae occasionally tinged crimson; fronto-lateral surfaces of pronotum and disc and ventral surfaces of mesonotum frequently tinged deep crimson. Tegmen and wing hyaline, veins dark brown, central areas of cells broadly dark brown, with a narrow hyaline margin adjacent to veins.

Shaft of aedeagus simple; dorsal surface subapically with a pair of flap-like processes, each bearing two acute spines dorsally. Paramere slender; apex narrowly rounded; dorsal process situated at two-thirds length, small, little produced posteriorly; dorsal surface at one-fifth length with a slender secondary process bearing a row of long, robust spines.

MATERIAL EXAMINED

Holotype ♂, Guyana: confluence of Oronoque and New rivers, 650 ft, ix-xii.1937 (Rosenberg) (BMNH).

Paratypes. Brazil: 1 9, Para; 1 9, Amazonas (BMNH).

This species is distinguished by the pigmentation of the tegmen and wing, and by the structure of the male genitalia.

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Mysidia glauca Distant

(Figs 188, 298, 407)

Mysidia glauca Distant, 1907: 397. LECTOTYPE of, BRAZIL (BMNH), here designated [examined].

Male: head 0.55 mm long, 0.80 mm wide; pronotum 1.60 mm wide; tegmen 7.10 mm long; wing 4.20 mm long. Female unknown.

Length of frons c. 5 times width at apex, c. 3 times width at base; ocelli obsolete; clypeus slightly longer than frons; rostrum terminating slightly posterior to hind coxae. Pronotal width 13 times mid-dorsal length, fronto-lateral carinae distinct; tegula not carinate.

Central area of frons, and genae dorsal to eyes and anterior to antennae, pale crimson; pronotum dorsally, around carinae on fronto-lateral surfaces, and anterior to fore coxae, pale crimson; mesonotum with lateral surfaces and coxae pale pinkish; posterior abdominal segments brown. Tegmen and wing pale smoky brown, unmarked, veins dark brown. Tegmen with costal vein narrowly crimson.

Shaft of aedeagus laterally expanded subapically; dorsal surface subapically with a pair of parallel flap-like processes; a pair of dorso-lateral flaps, each terminating anteriorly in an obtuse point. Paramere slender; apex broadly rounded; dorsal process situated at two-thirds length, rounded, not posteriorly produced, bearing a single, blunt spine; dorsal surface at one-third length with a low, rounded, secondary process bearing three robust spines.

MATERIAL EXAMINED

Lectotype J, Brazil: Parana de Buyassu, Lower Amazon, 18.i.1896 (Austin) (BMNH).

This species is distinguished by the pigmentation of the head and body, the absence of markings on the wing and tegmen, and by the unique structure of the paramere.

Mysidia gracilis sp. n.

(Figs 244, 355, 465)

Male: head 0.53 mm long, 0.76 mm wide; pronotum 1.53 mm wide; tegmen 7.65–7.90 mm long; wing 4.80 mm long. Female: tegmen 8.50 mm long.

Length of frons 5.5 times width at apex, c. twice width at base; ocelli small, distinct; clypeus slightly longer than frons; rostrum extending slightly beyond hind coxae. Pronotal width c. 15 times mid-dorsal length, fronto-lateral carinae absent; tegula distinctly carinate.

Head and body tinged pale crimson; genae adjacent to eyes broadly crimson; pronotum dorsally, and adjacent to eyes on fronto-lateral surfaces, crimson. Tegmen and wing whitish hyaline; veins dark brown, edged pale smoky hyaline; cells distant from veins smoky brownish, pale hyaline medially. Wing with a very irregular, indistinct, pale brownish, transverse band at midlength; posterior and apical margins between veins broadly smoky brown.

Shaft of aedeagus expanded subapically; lateral surfaces each with a slender spine-like process subapically; dorsal surface subapically with a pair of large flap-like processes. Paramere slender, parallelsided; apex rounded; dorsal process situated slightly distad of midlength, strongly produced posteriorly; dorsal surface basally with a large, flap-like secondary process bearing numerous, large, robust spines.

MATERIAL EXAMINED

Holotype \mathcal{O}^{\dagger} , **Brazil**: Rio de Janeiro, i.1924 (*Williams*) (BMNH). Paratypes. **Brazil**: $2 \mathcal{O}^{\dagger}$, $2 \mathcal{Q}$, same data as holotype; Rezende (BMNH).

This species is distinguished by the pigmentation of the head, pronotum, tegmen and wing, and by the structure of the male genitalia.

Mysidia lucifera sp. n.

(Figs 232, 343, 452)

Male: head 0.56 mm long, 0.73 mm wide; pronotum 1.43 mm wide; tegmen 7.65 mm long; wing 4.25 mm long. Female: tegmen 8.50 mm long.

Length of frons 7 times width at apex, c. 2.5 times width at base; ocelli indistinct; clypeus slightly longer than frons; rostrum extending to midlength of abdomen. Pronotal width c. 14 times mid-dorsal length; fronto-lateral surfaces and tegula lacking distinct carinae.

Head and body tinged pale crimson; female with abdomen tinged crimson. Tegmen and wing whitish

hyaline, weakly and irregularly mottled pale smoky brown, veins and cross-veins brown. Tegmen with a very faint, pale brown, transverse band at midlength.

Shaft of aedeagus somewhat expanded over apical third; dorsal surface subapically with a pair of broad, apically bifid processes laterally; lateral surfaces each with a long, spine-like process subapically. Paramere slender; apex actutely rounded; dorsal process situated at two-thirds length, large, strongly produced posteriorly; dorsal surface at one-quarter length with a prominent, rounded, secondary process bearing numerous, long, robust spines.

MATERIAL EXAMINED

Holotype \mathcal{O}^{\dagger} , **Brazil**: Rezende, Estado de Rio, ii.1924 (*Williams*) (BMNH). Paratype. 1 \mathcal{Q} , same data as holotype (BMNH).

This species is only readily distinguished by reference to the structure of the male genitalia.

Mysidia havilandi sp. n.

(Figs 218, 329, 438)

Male: head 0.59 mm long, 0.80 mm wide; pronotum 1.55 mm wide; tegmen 6.80–7.44 mm long; wing 4.40 mm long. Female: tegmen 8.24 mm long.

Length of frons 5.5 times width at apex, 2.25 times width at base; ocelli large, prominent; clypeus slightly longer than frons; rostrum extending well beyond hind coxae. Pronotal width 15 times mid-dorsal length; fronto-lateral carinae prominent; tegula not carinate.

Head and body predominantly brown; base of vertex often crimson; base of antenna narrowly red; pronotum reddish dorsally, occasionally on fronto-lateral surfaces also; disc of mesonotum brown; scutellum deep red or reddish brown, adjacent surfaces of metanotum dark brown; abdomen deep red to blackish brown. Tegmen and wing pale brownish hyaline, narrowly crimson basally, apical and posterior margins very narrowly crimson; veins reddish brown, very broadly edged smoky brown. Tegmen with costal vein and apices of subcostal and radial veins crimson, an indistinct, brown, transverse band extending from costal margin to first fork of cubital vein. Wing with posterior margins of cells narrowly smoky brown; first anal vein crimson.

Shaft of aedeagus slender, cylindrical, dorso-laterally expanded into a pair of large, curving, spine-like processes; apex with a pair of small curved processes. Paramere slender; dorsal process situated somewhat distad of midlength, robust; dorsal surface somewhat expanded at one-third length, bearing long robust spines.

MATERIAL EXAMINED

Holotype O, Guyana: Tumatumari, 19. vii. 1923 (Williams) (BMNH).

Paratypes. Guyana: 4 0° , 1 9, same data as holotype (BMNH). Brazil: 3 0° , 5 9, Amazonas (INPA; NR).

This species is distinguished by the dark pigmentation of the body, tegmen and wing, and by the structure of the male genitalia.

Mysidia etheldreda sp. n.

(Figs 254, 365, 475)

Male: head $0.65 \text{ mm} \log_1 1.00 \text{ mm}$ wide; pronotum 2.14 mm wide; tegmen $9.60 \text{ mm} \log_3$; wing $5.44 \text{ mm} \log_2$. Female unknown.

Length of frons c. 7 times width at apex, 2.5 times width at base; ocelli small, distinct; clypeus c. one-third longer than frons; rostrum extending to base of subgenital plate. Pronotal width c. 24 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Disc of mesonotum dark brown, scutellum blackish brown. Tegmen and wing predominantly whitish hyaline, irregularly marked smoky brown; veins yellow; apical margins between branches of medial veins very broadly smoky brown. Tegmen pale smoky brown over basal quarter; medial and cubital areas pale brown from approximately one-third length to midlength; costal and radial areas brownish subapically. Wing narrowly brownish basally; a narrow and irregular, obliquely curving, smoky brown, transverse band immediately basad of first fork of cubital vein; second fork of cubital vein and cubital-medial cross-vein edged smoky brown; first branch of cubital vein subapically broadly edged smoky brown.

Shaft of aedeagus robust; apex strongly produced, curving antero-dorsad; lateral surfaces subapically each with a large flap-like process extending over dorsal surface, each process with a pair of anteriorly

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directed spines at internal angle; dorso-lateral surfaces each with a triangular flap-like process at midlength; dorsal surface subbasally with a broad transverse process. Paramere broad; apex obtusely rounded; dorsal process situated at midlength, small, weakly produced posteriorly. Subgenital lateral sternites each with posterior margin produced into a very long, slender, parallel-sided, horizontally directed lobe.

MATERIAL EXAMINED

Holotype O, Brazil: Amazonas, P. das Laranjeiras, vii.-viii.1981 (Arias) (INPA).

This species, though closely related to *estfarchina* and *molesta*, is readily distinguished by the pigmentation of the tegmen and wing.

Mysidia liquida sp. n.

(Figs 224, 335, 443)

Male: head $0.65 \text{ mm} \log_{10} 0.82 \text{ mm}$ wide; pronotum 1.60 mm wide; tegmen $9.35-10.20 \text{ mm} \log_{10}$; wing $5.44 \text{ mm} \log_{10}$ Female: tegmen $11.05-13.60 \text{ mm} \log_{10}$.

Length of frons c. 6 times width at apex, c. 3 times width at base; ocelli distinct; clypeus one-sixth longer than frons; rostrum extending to base of subgenital plate. Pronotal width 40 times mid-dorsal length; fronto-lateral carinae indistinct; tegulae distinctly carinate.

Genae anterior to eyes tinged reddish orange; fronto-lateral surfaces of pronotum each with a large, dark brown irregularly circular spot at level of eye and adjacent to lateral margin; tegula dark brown medially; disc of mesonotum with a pair of large, prominent, roughly circular, dark brown spots posteriorly. Tegmen and wing pale, whitish hyaline, lacking prominent markings; veins pale; cross-veins pale brownish, narrowly margined smoky brown. Tegmen with costal area tinged brownish yellow, narrowly dark brown basally. Wing unmarked.

Shaft of aedeagus greatly expanded subapically; dorso-lateral surfaces each with a very large, flap-like process extending over dorsal surface, lacking spine-like secondary processes. Paramere slender; apex acute; dorsal process strongly produced posteriorly.

MATERIAL EXAMINED

Holotype ♂, **Bolivia**: Bueyas [?] (BMNH).

Paratypes. Bolivia: 2 o^{*}, 1 Q, same data as holotype; Buena Vista (BMNH; FAMU). Venezuela: 1 o^{*} (NR). Peru: 1 Q, Callanga (BMNH).

This species is distinguished by the dark spots on the fronto-lateral surfaces of the pronotum, the almost complete absence of pigmentation on the tegmen and wing, and by the massive aedeagus.

Mysidia ariasi sp. n.

(Figs 185, 295, 404)

Male: head $0.63 \text{ mm} \log_{10} 1.08 \text{ mm}$ wide; pronotum 2.06 mm wide; tegmen $9.40 \text{ mm} \log_{10}$; wing $5.60 \text{ mm} \log_{10}$. Female unknown.

Length of frons c. 6 times width at apex, 2.5 times width at base; ocelli obsolete; clypeus c. as long as frons; rostrum extending to base of sugenital plate. Pronotal width c. 24 times mid-dorsal length; fronto-lateral carinae distinct; tegula not carinate.

Fronto-lateral surfaces of pronotum at level of eyes each with a prominent, dark brown, roughly circular spot, not reaching either internal or lateral margins; tegula tinged brownish on ventral margins; fore tibia and tarsus brownish. Tegmen and wing hyaline, without distinct markings. Tegmen with costal area tinged yellowish brown; apical and posterior margins weakly smoky brown; cross-veins brownish; apex of anal vein with a small, triangular, brownish spot. Wing with posterior and apical margins indistinctly smoky brown; radial-medial cross-vein narrowly edged smoky brown.

Shaft of aedeagus broad; dorso-lateral surfaces subapically each with a large flap-like process extending over ventral surfaces, dorsally produced into a rounded lobe bearing a small conical projection. Paramere slender; apex acutely rounded; dorsal process situated slightly basad of mid-length, large, apex strongly produced posteriorly; dorsal surface distad of process somewhat produced.

MATERIAL EXAMINED

Holotype O', Brazil: Amazonas, P. das Laranjeiras, viii.-ix.1981 (Arias) (INPA).

This species is distinguished by the prominent dark spots on the fronto-lateral surfaces of the pronotum and the lack of distinct markings on the tegmen and wing; from *liquida* it is separated by the structure of the male genitalia.

Mysidia fuscofrontalis sp. n.

(Figs 245, 356, 466)

Male: head 0.67 mm long, 0.88 mm wide; pronotum 2.37 mm wide; tegmen 8.90 mm long; wing 5.10 mm long. Female unknown.

Length of frons c. 4 times width at apex, $2 \cdot 25$ times width at base; ocelli large, not prominent; clypeus slightly longer than frons; rostrum terminating immediately posterior to hind coxae. Pronotal width 28 times mid-dorsal length, fronto-lateral carinae absent; tegula with carinae very prominent.

Head with base of vertex, and genae from base to level of ventral margins of eyes, bright scarlet; fronto-lateral surfaces of pronotum each with a narrow, bright scarlet, horizontal band extending from adjacent to base of head to lateral margin. Tegmen and wing whitish hyaline; veins, excepting subcostal and radial veins of tegmen, pale; cross-veins dark brown; posterior and apical margins broadly smoky brown between veins. Tegmen with subcostal and radial veins brown over greater part of length basally; clavus with a small, dark brown spot between anal veins, another slightly distad of point of fusion of anal veins, another subapically; cubital area with four, irregular brownish spots; costal cell dark brown between cross-veins, costal margin narrowly scarlet; medial vein with bases of first and second branches, and apical fork, dark brown, fifth and sixth branches each with two, evenly spaced, dark brown spots. Wing with first fork of cubital vein dark brown; with an irregular, dark brown spot over midlength of first cubital branch; second and third cubital branches, and both medial branches, dark brown from base to immediately prior to posterior margin.

Shaft of aedeagus slender; lateral surfaces subapically each with a large flap-like process, produced antero-dorsally into a long curving spine, and with a small spine ventrally. Paramere robust; apex broadly rounded, with a long, curving, flap-like process dorsally; dorsal process small, situated at midlength, posteriorly produced.

MATERIAL EXAMINED

Holotype O, Panama: Las Cumbres, 6.vi.1976 (Wolda) (FAMU).

This species is readily distinguished by the pigmentation of the head, pronotum, tegmen and wing.

Mysidia albipennis Westwood

(Figs 228, 339, 448)

Mysidia albipennis Westwood, 1840: 83. LECTOTYPE O', BRAZIL (UM), here designated [examined]. Mysidia parviceps Fowler, 1900: 73. LECTOTYPE Q, GUATEMALA (BMNH), here designated [examined]. Syn. n.

Male: head 0.63 mm long, 0.80 mm wide; pronotum 1.82 mm wide; tegmen 8.40–9.00 mm long; wing 5.60 mm long. Female: tegmen 8.84–9.20 mm long.

Length of frons c. 6 times width at apex, c. twice width at base; ocelli distinct; clypeus c. as long as frons; rostrum terminating at level of hind coxae. Pronotal width c. 14 times mid-dorsal length; fronto-lateral surfaces and tegula not distinctly carinate.

Vertex often scarlet from base to level of dorsal margins of eyes; genae each with a narrow, horizontal, dark brown/black band extending from adjacent to dorsal margin of eye to anterior margin; fronto-lateral surfaces of pronotum each with a broad reddish band extending horizontally from adjacent to eye to lateral margin, this band often incorporating a large black spot in its ventral margin; abdomen with a small, circular, black spot on either side of midline on dorsal surface of fifth segment. Tegmen and wing whitish hyaline, veins very pale brownish. Tegmen with cross-veins and first and second forks of medial vein dark brown; cells between branches of cubital and medial veins each with a smoky brown semicircular spot on posterior and apical margins; apical fork of medial vein covered by a prominent, circular, dark brown spot; clavus with an irregular dark brown spot between anal veins subbasally, another between fused anal veins and claval suture at two-thirds length, another between fused anal veins and posterior margin, and a fourth at apex of claval suture. Wing with apical and posterior margins narrowly smoky brown between veins; radial-medial cross-vein dark brown, an irregular, dark brown spot between medial and cubital veins at two-fifths length, another between first branch of cubital vein and first anal vein.

Shaft of aedeagus slender, laterally expanded over apical half; dorsal surface with a pair of large flap-like processes arising subapically and extending anteriorly to midlength. Paramere with apex very obtusely rounded; dorsal process situated at two-fifths length, small, with apex slender and strongly produced posteriorly; dorsal surface subbasally with a group of short robust spines.

MATERIAL EXAMINED

Lectotype \bigcirc (albipennis), Brazil: Vera Cruz (UM). Lectotype \bigcirc (parviceps), Guatemala: Zapota (Champion) (BMNH).

Honduras: 6 0⁷, 8 9, Lancertillo (FAMU; BMNH). Belize: 1 9 (FAMU).

Westwood did not indicate the number of specimens in the type-series of *albipennis*; the single male available for study is here designated as lectotype. The three female specimens of *parviceps* described by Fowler are not conspecific. The specimen here designated as lectotype has the tegmina damaged; it bears Fowler's handwritten 'type' label.

This species is readily distinguished by the distinctive pigmentation of the head and pronotum, the mottled appearance of the tegmen and wing, and by the structure of the male genitalia.

Mysidia lactiflora Westwood

Mysidia lactiflora Westwood, 1840: 83. LECTOTYPE Q, BRAZIL (UM), here designated [examined].

Female: head 0.75 mm long, 0.98 mm wide; pronotum 2.63 wide; tegmen 12.07 mm long; wing 7.00 mm long. Male unknown.

Length of frons 10 times width at apex, 2.5 times width at base; ocelli small, distinct; clypeus one quarter longer than frons; rostrum only just reaching hind coxae. Pronotal width c. 50 times mid-dorsal length, fronto-lateral carinae absent; tegula prominently carinate.

Base of vertex reddish; genae from level of dorsal margins of eyes to level of midline of eyes dull crimson; fronto-lateral surfaces of pronotum each with a prominent, broad, brownish band extending horizontally from adjacent to eye to lateral margin, each band deep red along dorsal margin; tegulae ventral to carinae deep brownish. Tegmen and wing almost hyaline, veins pale yellow, cross-veins brownish. Tegmen with first, second and apical forks of medial vein pale brownish; costal cell yellowish brown, bearing a small, prominent, roughly circular, dark brown spot at level of first fork of cubital vein, another similar spot adjacent to point of separation of fused subcostal and radial veins, a third, smaller spot at *c*. one-third length; with a small, roughly circular, prominent, dark brown spot over cross-vein linking second and third branches of medial vein; a small dark brown spot on anal margin somewhat distad of point of fusion of anal veins. Wing with cross-veins slightly darker brown than those of tegmen; a small, irregular, indistinct, brownish spot over first branch of cubital vein somewhat basad of midlength.

MATERIAL EXAMINED

Lectotype Q, **Brazil**: no further data (UM).

The lectotype has the abdomen partially eaten away, and the left tegmen and wing glued in place; Westwood's 'type' label gives the name as 'lactiflorea'.

This species, in the absence of reference to the male genitalia, is most readily distinguished by its large size, the markings on the fronto-lateral surfaces of the pronotum, and the paucity of markings on the tegmina and wings, in particular the absence of a dark spot over the apical fork of the medial vein of the tegmen.

Mysidia lacteola sp. n.

(Figs 193, 303, 412)

Male: head 0.88 mm long; 1.01 mm wide; pronotum 1.90 mm wide; tegmen 9.90–11.20 mm long; wing 5.80 mm long. Female: tegmen 11.20 mm long.

Length of frons 4.5 times width at apex, c. twice width at base; ocelli obscure; clypeus c. one-fifth longer than frons; rostrum extending to base of subgenital plate. Pronotal width c. 47 times mid-dorsal length, fronto-lateral carinae absent; tegula strongly carinate basally.

Antenna, frons at level of eyes, and fronto-lateral surfaces of pronotum occasionally tinged crimson. Tegmen and wing whitish hyaline, veins and cross-veins very pale brown. Tegmen with a pale brownish transverse band at level of first fork of cubital vein, another at level of medial-cubital cross-vein, and a third slightly distad of midlength; posterior and apical margins narrowly and faintly edged pale brown. Wing with a very faint, brownish, transverse band at midlength, and a second at level of radial-medial cross-vein.

Shaft of aedeagus slender, slightly expanded towards apex; dorso-lateral surfaces each expanded subapically into a low flap-like process; dorsal surface subapically with a slender spine on either side of midline. Paramere robust, dorsal process small, situated at two-fifths length, not posteriorly produced; dorsal surface at three-fifths length with a long, slender, apically rounded secondary process.

MATERIAL EXAMINED

Holotype O, French Guiana: Mana River, v.1917 (CM).

Paratypes. French Guiana: 1 Q, same data as holotype (BMNH). Trinidad: 1 O' (USNM). Brazil: 5 O', 15 Q, Taracua (NR; BMNH).

The structure of the male genitalia, in particular the paramere, is very distinctive.

Mysidia squamigera (Fabricius)

Derbe squamigera Fabricius, 1803: 81. LECTOTYPE Q, CENTRAL AMERICA (ZM), here designated [examined].

Mysidia squamigera (Fabricius) Westwood, 1840: 83.

Female: head 0.75 mm long, 1.08 mm wide; pronotum 2.37 mm wide; tegmen 10.50 mm long; wing 6.40 mm long. Male unknown.

Length of frons 7 times width at apex, c. 3 times width at base; ocelli small, distinct; clypeus c. one-fifth longer than frons; rostrum extending to base of subgenital plate. Pronotal width 50 times mid-dorsal length, fronto-lateral carinae absent; tegula prominently carinate.

Antenna and genae irregularly orange; fronto-lateral surfaces of pronotum very dark brown dorsally and laterally; tegula dark brown with dorsal margin narrowly pale; disc of mesonotum smoky brown over posterior three-quarters length; abdomen with dorsal surface narrowly smoky brown adjacent to midline. Tegmen and wing predominantly whitish hyaline, veins pale yellow or brown, cross-veins and posterior margins broadly smoky brown. Tegmen with costal and radial areas very dark brown, interrupted by narrow, irregular, yellow, transverse bands basad and distad of level of point of separation of fused subcostal and radial veins, and slightly basad of two-thirds length; base, including clavus, dark brown; a broad, transverse, dark brown band at one-sixth length; a narrower and more broken band over first fork of cubital vein; a more distinct, somewhat oblique band extending from medial vein to apex of clavus; indistinct irregular markings over radial-medial cross-vein and apical fork of radial vein. Wing with an irregular, smoky brown, transverse band at *c*. two-fifths length.

MATERIAL EXAMINED

Lectotype \mathcal{Q} , Central America (*Schmidt*) (ZM).

Brazil: $1 \neq (INPA)$.

The second syntype is also female, but is not conspecific. The lectotype is damaged and its left tegmen is missing.

The pigmentation of this species is very distinctive, and readily separates it from *costata* with which it is frequently confused.

Mysidia costata (Fabricius)

(Figs 220, 330, 440)

Derbe costata Fabricius, 1803: 81. LECTOTYPE Q, CENTRAL AMERICA (ZM), here designated [examined].

Mysidia costata (Fabricius) Westwood, 1840: 83.

Male: head $0.74 \text{ mm} \log_{10} 1.05 \text{ mm}$ wide; pronotum 2.31 mm wide; tegmen $8.10-11.25 \text{ mm} \log_{10}$; wing $6.30 \text{ mm} \log_{10}$. Female: tegmen $10.60-13.00 \text{ mm} \log_{10}$.

Length of frons 4.5 times width at apex, c. twice width at base; ocelli small, distinct; clypeus one-third longer than frons; rostrum extending to base of subgenital plate. Pronotal width 22 times mid-dorsal length; fronto-lateral surfaces and tegulae not carinate.

Fronto-lateral surfaces of pronotum each with a large, roughly circular, dark brown spot, c. as large as eye, situated adjacent to lateral margin, well distant from eye; tegula concolorous with, or slightly paler, than eye; disc of mesonotum usually brownish. Tegmen and wing whitish hyaline, veins pale yellow, cross-veins pale brownish, posterior margins between veins smoky brown. Tegmen with costal cell pale brownish, darker at base; otherwise unmarked. Wing unmarked.

Shaft of aedeagus broad, tapering from base to apex in dorsal aspect; dorsal surface subapically with a

pair of large flap-like processes, each strongly produced anteriorly into a long slender lobe bearing a small tooth-like spine laterally at apex; ventral surface subapically produced into a long, transverse, spine-like process. Paramere slender; apex acutely rounded; dorsal process well developed, situated at approximately one-third length, posteriorly produced; dorsal surface at two-thirds length strongly and roundly produced into a medially directed lobe.

MATERIAL EXAMINED

Lectotype Q, Central America: no further data (Schmidt) (ZM).

21 O', 27 9 from various localities in Guyana, Trinidad, Brazil, Surinam, Peru and Ecuador.

Many of the above specimens were incorrectly determined as *squamigera* which is readily distinguished from *costata* by the strongly pigmented tegmina.

Mysidia pseudocostata sp. n.

(Figs 208, 319, 427)

Male: head 0.55 mm long, 0.88 mm wide; pronotum 2.75 mm wide; tegmen 9.35–10.20 mm long; wing 5.53 mm long. Female: tegmen 10.20–11.90 mm long.

Length of frons c. 7 times width at apex, c. 2.5 times width at base; ocelli small, obscure; clypeus slightly longer than frons; rostrum extending to base of subgenital plate. Pronotal width 23 times mid-dorsal length; fronto-lateral carinae absent.

Fronto-lateral surfaces of pronotum each with a broad orange-brown band extending horizontally from adjacent to eye to lateral margin; tegula pale brownish. Tegmen and wing whitish hyaline; veins very pale; cross-veins slightly darker, brownish. Tegmen with costal cell yellowish brown, otherwise unmarked. Wing unmarked.

Shaft of aedeagus basally slender, gradually broadening towards apex; lateral surfaces subapically each with a large, flap-like, process bearing a small, tooth-like projection on external surface. Paramere slender; apex narrowly rounded; dorsal process large, situated somewhat basad of mid-length, strongly produced posteriorly; dorsal surface at three-fifths length produced into a large, apically acute secondary process densely covered with small tooth-like spines.

MATERIAL EXAMINED

Holotype O', Guyana: Bugaba, 800–1500 ft (Champion) (BMNH).

Paratypes. 4 0, 2 9, same data as holotype; San Isidro; Blairmont (BMNH). Brazil: 1 9, Campinas (BMNH).

The holotype, the other two specimens from the type-locality, and the single specimen from San Isidro, all collected by Champion, are part of the *Biologia Centrali Americana* material, and were previously determined as '*costata* Fowler'.

Externally this species closely resembles *costata* but is distinguished by the fronto-lateral surfaces of the pronotum which have a horizontal reddish band; in *costata* the fronto-lateral surfaces bear a circular dark brown spot. The structure of the male genitalia is also distinct.

Mysidia delicatissima Fowler

(Figs 275, 386, 496)

Mysidia delicatissima Fowler, 1900: 74. LECTOTYPE O', MEXICO (BMNH), here designated [examined].

Male: head 0.48 mm long, 0.68 mm wide; pronotum 1.30 mm wide; tegmen 6.80 mm long; wing 4.40 mm long. Female unknown.

Length of frons 5 times width at apex, c. twice width at base; ocelli obsolete; clypeus as long as frons; rostrum terminating at level of hind coxae. Pronotal width 32 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Genae each with a brownish spot at level of eye; abdomen with an oval dark brown spot on dorsal surface at either side of midline on fifth and sixth segments. Tegmen and wing whitish hyaline, veins pale, cross-veins brownish, posterior margins pale smoky brown. Tegmen with medial forks brown.

Shaft of aedeagus laterally expanded over apical half; dorsal surface subapically with a pair of very large flap-like processes, each terminating anteriorly in an acute spine. Paramere robust; apex broadly rounded; dorsal process very large, prominent, situated at midlength.

MATERIAL EXAMINED

Lectotype O', Mexico: Teapa, Tabasco, iii (Smith) (BMNH).

The size and the relative lack of pigmentation of the tegmina and wing, and the structure of the male genitalia, readily distinguish this species.

Mysidia bianca sp. n.

(Figs 207, 318, 426)

Male: head 0.60 mm long, 0.90 mm wide; pronotum 1.93 mm wide; tegmen 10.03 mm long; wing 5.95 mm long. Female unknown.

Length of frons 5 times width at apex, 2.5 times width at base; ocelli small, indistinct; clypeus slightly longer than frons; rostrum terminating slightly posterior to hind coxae. Pronotal width 16 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Genae dorsad of eyes, and vertex, brownish; fronto-lateral surfaces of pronotum brownish yellow. Tegmen and wing whitish hyaline, cross-veins narrowly edged smoky brown. Tegmen with costal margin narrowly brownish; costal cell with a small dark spot adjacent to fork of fused subcostal and radial veins, and another similar spot somewhat basad; a small indistinct spot at apex of clavus, and another at apex of anal vein. Wing lacking distinct markings, posterior margin weakly edged smoky brown.

Shaft of aedeagus broad, expanded over apical third; dorsal surface subapically with a pair of long, curving, spine-like processes, and a pair of flap-like processes, each terminating in an acute point and a pair of ventrally directed projections laterally. Paramere slender; dorsal process large, situated at midlength; dorsal surface at three-quarters length with a large secondary process bearing numerous short robust spines.

MATERIAL EXAMINED

Holotype O', **Bolivia**: Prov. del Sara (*Steinbach*) (CM).

This species can be distinguished most readily by the structure of the male genitalia.

Mysidia cooperi sp. n.

(Figs 247, 358, 468)

Male: head 0.59 mm long, 0.88 mm wide; pronotum 2.06 mm wide; tegmen 8.60 mm long; wing 5.61 mm long. Female unknown.

Length of frons 5 times width at apex, 1.66 times width at base; ocelli small, obscure; clypeus c. as long as frons; rostrum extending fractionally beyond hind coxae. Pronotal width 16 times mid-dorsal length, fronto-lateral carinae very prominent; tegula with carinae weak.

Frons and genae at level of eyes irregularly brownish; fronto-lateral surfaces of pronotum at level of eyes broadly pale orange. Tegmen and wing whitish hyaline, veins pale, cross-veins very dark brown. Tegmen with costal margin narrowly black basally; costal cell with a prominent blackish spot at level of point of separation of subcostal and radial veins; clavus with a blackish brown spot at apex of anal vein; apical and posterior margins with semicircular smoky brown spots between veins. Wing with radial-medial cross-vein very dark brown; a dark brown spot between cubital vein and claval suture at midlength; a dark spot on posterior margin at apex of clavus; semi-circular dark spots on posterior margin between branches of cubital, medial and radial veins.

Shaft of aedeagus rotated 90° clockwise in anterior aspect; right lateral surface subapically produced into a pair of flap-like processes bearing very numerous, small, conical spines, ventral process terminating anteriorly in an acute spine. Paramere slender, apex acute; dorsal process situated at midlength, robust, apex little produced.

MATERIAL EXAMINED

Holotype O', Colombia: Putumayo, Mocoa, 550 m, 16.viii.1978 (Cooper) (BMNH).

This species is readily distinguished by the pigmentation and by the unique structure of the aedeagus.

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Mysidia diana sp. n.

(Figs 227, 338, 447)

Male: head 0.63 mm long, 0.80 mm wide; pronotum 1.82 mm wide; tegmen 9.35 mm long; wing 5.53 mm long. Female: tegmen 11.22 mm long.

Length of frons 6.5 times width at apex, 2.66 times width at base; ocelli small, distinct; clypeus one-quarter longer than frons; rostrum extending to base of subgenital plate. Pronotal width 18 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Head and body unmarked. Tegmen and wing whitish hyaline. Tegmen with costal margin smoky brown; an irregular brownish band extending over first fork of cubital vein almost to vanal fold; indistinct pale brown mottling immediately distad of midlength; a small, prominent, dark brown spot over bases of fourth, fifth and sixth branches of medial vein; a smaller dark spot on margin over apex of fifth branch of medial vein; cross-veins narrowly dark brown. Wing with anal area irregularly mottled smoky brown extending over first and second forks of cubital vein; a very large smoky brown area covering radial-medial cross-vein and branches of medial vein extending to apical margin between branches of medial and cubital veins.

Shaft of aedeagus robust; dorsal surface subapically with a pair of very large, apically truncate, flap-like processes. Paramere broad, apex rounded; dorsal process situated immediately basad of midlength, strongly produced posteriorly; internal lateral surface with a low curving ridge bearing robust spines at one-quarter length.

MATERIAL EXAMINED

Holotype \mathcal{O} , **Ecuador**: Feltons, 12 km Napo, nr Tema, 8.iv.1923 (*Williams*) (BMNH). Paratype. **Ecuador**: 1 \mathcal{Q} , Tema (BMNH).

This species is readily distinguished by the pigmentation of the wing and by the structure of the male genitalia.

Mysidia dollingi sp. n.

(Figs 255, 366, 476)

Male: head 0.63 mm long, 0.95 mm wide; pronotum 1.97 mm wide; tegmen 9.35 mm long; wing 5.10 mm long. Female: tegmen 10.00–11.40 mm long.

Length of frons c. 7 times width at apex, 2.5 times width at base; ocelli indistinct; clypeus one-fifth longer than frons; rostrum extending to base of subgenital plate. Pronotal width 19 times mid-dorsal length, fronto-lateral carinae absent; tegula prominently carinate.

Head with a broad orange band extending horizontally from anterior margin of genae to eye, and continuing over fronto-lateral surface of pronotum to lateral margin. Tegmen and wing whitish hyaline, posterior and apical margins pale smoky brown, cross-veins dark brown; veins intermittently narrowly edged smoky brown. Tegmen with costal cell pale brownish, with a small dark brown spot at level of first fork of cubital vein and another immediately basad of second fork; claval margin with a small brown spot adjacent to point of fusion of anal veins and another at apex of anal vein.

Shaft of aedeagus basally slender, becoming laterally expanded towards apex; dorsal surface subapically with a pair of slender spine-like processes and a pair of lateral flap-like processes, each terminating in a small spine. Paramere very robust; apex broadly rounded; dorsal process situated somewhat distad of midlength, apex produced posteriorly; dorsal surface at one-quarter length with a rounded flap-like secondary process bearing numerous, very long, robust spines.

MATERIAL EXAMINED

Holotype O, Panama: Canal Zone, Barro Colorado, 8.viii. 1967 (O'Brien) (FAMU).

Paratypes. Panama: $1 \circ, 4 \circ$, Canal Zone (FAMU; BMNH). Costa Rica: $4 \circ$, Guan, 5 miles SE. Liberia (FAMU; BMNH).

Mysidia striata sp. n.

Female: head 0.50 mm long, 0.71 mm wide; pronotum 1.40 mm wide; tegmen 6.80 mm long; wing 3.80 mm long. Male unknown.

Length of frons 6 times width at apex, c. twice width at base; ocelli very large, prominent; clypeus slightly longer than frons; rostrum terminating immediately posterior to hind coxae. Pronotal width 14 times mid-dorsal length; fronto-lateral carinae distinct; tegula without carinae.

Genae dorsad of eyes tinged reddish; pronotum white, fronto-lateral surfaces each with a broad, dark reddish brown band extending horizontally dorsad of carina from adjacent to eye to lateral margin; another similar band terminating immediately prior to reaching lateral margin at level of ventral margin of eye; meso- and metanotum yellowish brown dorsally, tinged reddish ventrally; coxae reddish; abdomen dorsally deep brown, paler at mid-dorsal line, ventral surface deep reddish. Tegmen and wing yellowish hyaline, veins yellow. Tegmen with cross-veins edged pale brownish; a narrow, brown, transverse band extending from costal margin to apex of clavus; a large dark brownish spot at three-quarters length extending obliquely from costal to posterior margin at level of cross-veins; apical two-fifths brown, medial and apical cells broadly hyaline medially.

MATERIAL EXAMINED

Holotype Q, Brazil: Para, Jabaty, v.1924 (Williams) (BMNH).

Paratype. 1 \mathcal{Q} , same data as holotype (BMNH).

In the absence of males, this species is very readily distinguished by its pigmentation, especially the unique double horizontal dark bands on the fronto-lateral surfaces of the pronotum.

Mysidia sanguinea sp. n.

(Figs 215, 325, 434)

Male: head 0.71 mm long, 0.90 mm wide; pronotum 1.68 mm wide; tegmen 7.20–8.30 mm long; wing 4.33 mm long. Female: tegmen 7.40–8.40 mm long.

Length of frons 5.5 times width at apex, 2.5 times width at base; ocelli large, prominent; clypeus as long as frons; rostrum terminating immediately posterior to hind coxae. Pronotal width 17 times mid-dorsal length, fronto-lateral carinae highly elevated; tegula not distinctly carinate.

Frons, genae ventral to lower margins of eyes, and vertex deep reddish brown; ocelli orange; fronto-lateral surfaces of pronotum ventral to midline of eyes, fore tibia, apices of mid and hind tibia, and disc of mesonotum dark reddish brown; pronotum dorso-laterally, under surfaces of mesonotum, metanotum, and abdomen, and legs pale brownish; dorsal surface of abdomen dark reddish brown/black, pregenital segment narrowly crimson posteriorly. Tegmen and wing whitish hyaline, veins dark brown/ black. Tegmen with a large, irregular, dark-brown spot near base, another at apex of clavus; a transverse dark band extending from costal margin to first fork of cubital vein, linking with another dark spot at first fork of medial and radial veins narrowly edged orange or yellow; posterior margin between veins narrowly dark brown. Wing with an irregular, obliquely transverse dark brownish band covering forks and cross-veins; branches of medial and cubital veins narrowly edged dark brown; posterior margin narrowly and distinctly dark.

Male genitalia with shaft of aedeagus slender; ventral surface subapically with a pair of slender spines; dorsal surface unarmed. Paramere basally slender, becoming expanded from midlength; apex obtusely rounded; dorsal process large, robust, situated at two-thirds length; dorsal surface at one-third length with a large, obtusely rounded, secondary process bearing numerous short robust spines.

MATERIAL EXAMINED

Holotype O, Brazil: Vila Amazonas, Amapá, 21.iii.1963 (Ross) (CAS).

Paratypes. Brazil: 6 ♂, 13 ♀, Amazonas (CAS; INPA; BMNH). Peru: 1 ♂, Tingo Maria (CAS). Surinam: 1 ♂, Brokopondo (FAMU).

This species is readily distinguished by the striking pigmentation of the head, body, tegmina and wings, and by the unique structure of the male genitalia, in particular the aedeagus.

Mysidia calypso sp. n.

(Figs 237, 146, 457)

Male: head 0.53 mm long, 0.78 mm wide; pronotum 1.72 mm wide; tegmen 8.84 mm long; wing 5.10 mm long. Female unknown.

Length of frons c. 7 times width at apex, c. 2.5 width at base; ocelli very large, prominent; clypeus c. as long as frons; rostrum terminating immediately posterior to hind coxae. Pronotal width 20 times mid-dorsal length; fronto-lateral carinae distinct; tegula not carinate.

Disc of mesonotum and dorsal surface of abdomen dark brown; ocelli yellow, narrowly edged scarlet.

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Tegmen and wing whitish hyaline, veins dark brown. Tegmen with cross-veins narrowly edged dark brown; posterior margin between veins broadly brownish; basal cells irregularly smoky brown medially; apical cells and cells on posterior margin irregularly edged smoky brown; clavus with a dark spot subapically; a dark brown spot between apex of clavus and first branch of cubital vein. Wing with apex of clavus, adjacent area at level of first branch of cubital vein, and apical one-fifth length broadly dark smoky brown.

Shaft of aedeagus slender; dorsal surface subapically with a pair of long apically serrated processes laterally, and a pair of broad flap-like processes bearing numerous small conical spines medially, each with a small spine basally; ventral surface with a pair of short, apically acute, flap-like processes subapically. Paramere very slender; apex obliquely truncate; dorsal process arising slightly basad of midlength, greatly produced posteriorly; dorsal surface at one-fifth length with a broadly rounded secondary process bearing numerous short robust spines.

MATERIAL EXAMINED

Holotype O', Brazil: Rezende, Estado de Rio, ii. 1924 (Williams) (BMNH).

This species is distinguished by the tegminal, and especially the wing, pigmentation, and by the structure of the male genitalia.

Mysidia lucianna sp. n.

(Figs 262, 373, 481)

Male: head 0.54 mm long, 0.90 mm wide; pronotum 1.89 mm wide; tegmen 8.80–9.10 mm long; wing 5.35 mm long. Female: tegmen 9.35–9.84 mm long.

Length of frons c. 4 times width at apex, c. twice width at base; ocelli obsolete; clypeus c. one-third longer than frons; rostrum terminating at level of mid coxae. Pronotal width 13 times mid-dorsal length; fronto-lateral carinae very prominent; tegula distinctly carinate.

Frons with a narrow, transverse, dark brown band at level of dorsal margins of eyes; vertex mottled dark brown; fronto-lateral surfaces of pronotum each with a broad pale orange band extending horizontally from adjacent to eye to lateral margin. Tegmen and wing whitish hyaline, cross-veins narrowly dark brown. Tegmen with a small dark brown spot on costal margin slightly basad of one-third length; an irregular pale brown area around apical forks of radial and medial veins; a small brown spot on claval margin at apex of anal vein; a paler brown spot at level of junction of anal veins; apical margin between veins with small smoky brown spots. Wing with a transverse brown marking over cubital vein at midlength; posterior margin with dark brown spots between anal veins, between branches of cubital vein, and between cubital and medial branches.

Shaft of aedeagus slightly asymmetrical, somewhat expanded over apical half; dorsal surface subapically with a pair of large flap-like processes bearing numerous, extremely small, tooth-like projections; left-hand process terminating anteriorly in a curved spine. Paramere long and slender; apex acute; dorsal process robust, not greatly produced posteriorly, situated at midlength; dorsal surface at approximately one-fifth length with a small, blunt, secondary process bearing numerous long slender spines.

MATERIAL EXAMINED

Holotype O', Brazil: Belem, Para, vi.1924 (Williams) (BMNH).

Paratypes. Brazil: 15 0^{*}, 22 Q (BMNH; FAMU; INPA). Surinam: 1 0^{*}, S. Kraka (FAMU).

This species is most readily determined by the pigmentation of the head and pronotum, and by the structure of the male genitalia.

Mysidia peregrina sp. n.

(Figs 182, 292, 401)

Male: head 0.52 mm long, 0.82 mm wide; pronotum 2.12 mm wide; tegmen 7.65 mm long; wing 4.42 mm long. Female unknown.

Length of frons 4 times width at apex, 2.5 times width at base; ocelli large, prominent; clypeus c. as long as frons; rostrum terminating at level of hind coxae. Pronotal width c. 9 times mid-dorsal length, fronto-lateral carinae very prominent; tegula not carinate.

Fronto-lateral surfaces of pronotum each with a brownish band extending horizontally from adjacent to eye to lateral margin; disc of mesonotum whitish anteriorly, gradually darkening posteriorly. Tegmen and wing whitish hyaline. Tegmen with cross-veins and branches of veins dark brown; cells, especially those adjacent to costal margin, densely mottled smoky brown; a small, distinct black spot over apical fork of

medial vein; a small, but very distinct, black spot in each of the five apical cells. Wing with veins dark brown; cells faintly and sparsely mottled smoky brown.

Shaft of aedeagus cylindrical; apex slightly expanded, curving dorsally; ventral surface subapically with numerous, extremely small, blunt spines; dorsal surface subapically with a pair of long spines laterally, and a pair of hooked spine-like processes adjacent to midline. Paramere basally slender, expanded apically; dorsal process reduced to a simple, posteriorly directed hook at one-third length; internal surface with a low, transverse, flap-like process bearing robust spines at one-quarter length.

MATERIAL EXAMINED

Holotype O, Brazil: Mato Grosso, Barra do Tapirape, 30.xii.1952 (Malkin) (CAS).

This species is readily distinguished by the prominent black spot on the tegmen; and by the unique structure of the male genitalia in which the complex armature of the aedeagus is coupled with the great reduction in the development of the dorsal process of the paramere.

Mysidia fowleri sp. n.

(Figs 173, 282, 391)

Male: head $0.44 \text{ mm} \log_{10} 0.61 \text{ mm}$ wide; pronotum 1.64 mm wide; tegmen $5.50-5.90 \text{ mm} \log_{10}$; wing $3.05 \text{ mm} \log_{10}$ Female: tegmen $6.20-6.40 \text{ mm} \log_{10}$.

Length of frons 4 times width at apex, twice width at base; ocelli large, not prominent; clypeus one-quarter longer than frons; rostrum terminating immediately posterior to hind coxae. Pronotal width 11 times mid-dorsal length, fronto-lateral carinae prominent; tegula distinctly carinate.

Fronto-lateral surfaces of pronotum each with an orange band extending horizontally from adjacent to eye to lateral margin. Tegmen and wing clear hyaline, costal margins and basal areas predominantly dark brown, veins and cross-veins broadly margined dark smoky brown.

Shaft of aedeagus slender in dorsal aspect; ventral surface at midlength and subapically thickly covered with tiny blunt spines; dorsal surfaces at two-thirds length with a pair of rounded flap-like processes and a pair of slender spines. Paramere with dorsal process situated at one-quarter length, greatly produced posteriorly; a large flap-like process on internal surface basally; dorsal surface over apical half strongly curved towards midline, bearing numerous short robust spines; ventral surface subbasally with numerous long slender spines, at midlength with a long, slender, apically rounded process.

MATERIAL EXAMINED

Holotype \circlearrowleft , **Panama**: C.Z., Fort Kobbe, 24.vi.1976 (*Riley*) (FAMU). Paratypes. 1 \circlearrowleft , 3 \diamondsuit , same data as holotype (FAMU; BMNH).

The external characters confirm the placement of this species in *Mysidia*, but the male genitalia are not characteristic of the genus.

Mysidia grandis sp. n.

Female: head 0.80 mm long, 1.05 mm wide; pronotum 2.56 mm wide; tegmen 13.25–13.40 mm long; wing 7.80 mm long. Male unknown.

Length of frons c. 6 times width at apex, 4 times width at base; ocelli large, not prominent; clypeus one-sixth longer than frons; rostrum extending to base of pregenital segment. Pronotal width 24 times mid-dorsal length; fronto-lateral carinae absent; tegula with distinct carinae.

Genae occasionally tinged brownish between eye and anterior margin; fronto-lateral surfaces of pronotum occasionally tinged with orange laterally; tegula dorsad to carinae dark brown; disc of mesonotum with a broad, dark brown, transverse band medially; metanotum with a large, circular, dark brown spot on either side at base of scutellum. Tegmen and wing whitish hyaline, veins pale brown, cross-veins edged smoky hyaline, posterior and apical margins with smoky brown spots between veins. Tegmen with costal cell white, with a small, dark brown spot at level of subcostal-radial fork, and another somewhat basad; basal half of cells between radial and medial veins, and entire cell between medial and cubital veins boldly and irregularly mottled dark brown and yellow, adjacent cells mottled smoky hyaline; radial vein with a prominent, roughly circular, blackish brown spot over apical fork; fifth and sixth radial branches linked by a paler, irregular, brownish spot; first cubital branch with a large, irregular, brown spot extending to claval margin. Wing with a large, irregular, broad, smoky brown band extending from cubital vein to anal margin at approximately one-fifth length.

MATERIAL EXAMINED

Holotype Q, **Panama**: Chiriqui, Fortuna, 82 15'W 8 44'N, 17.v.1978 (*O'Brien & Marshall*) (FAMU). Paratype. 1 Q, same data as holotype (BMNH).

This species is readily distinguished by its large size and by the pigmentation of the thorax and tegmina.

Mysidia minerva sp. n.

(Figs 205, 315, 424)

Male: head 0.55 mm long, 0.63 mm wide; pronotum 1.25 mm wide; tegmen 5.70–6.55 mm long; wing 3.80 mm long. Female unknown.

Length of frons 5 times width at apex, twice width at base; ocelli large, prominent; clypeus slightly shorter than frons; rostrum terminating level with hind coxae. Pronotal width 20 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Genae and frons at level of eyes pale reddish brown; fronto-lateral surfaces of pronotum each with a prominent bright orange band extending horizontally from adjacent to eye to lateral margin; dorsal surface of abdomen basally mottled bright orange. Tegmen and wing hyaline. Tegmen with veins pale brown; cross-veins and forks of veins dark brown, very narrowly edged smoky brown; with two roughly circular dark smoky brown spots on costal cell subbasally; apex of clavus with a large, irregular, smoky brown spot. Wing with veins over apical two-thirds length dark brown; apex of claval area narrowly dark smoky brown.

Shaft of aedeagus slender, apex laterally expanded; dorsal surface subapically with a pair of large, rounded, flap-like processes, each bearing a small spine-like projection subbasally. Paramere with apex broadly and irregularly rounded; dorsal process large, situated at two-thirds length, strongly produced postero-dorsally.

MATERIAL EXAMINED

Holotype O^{*}, **Belize**: Toledo District, Salamanca, 25 miles NW. Punta Gorda, 28.viii.1978 (*Broomfield*) (BMNH).

Paratypes. Belize: 1 o, Belize; 1 o, Orange Walk District (FAMU).

This species is most readily distinguished by the very sparse pigmentation of the tegmen and wing, coupled with the bright orange bands on the pronotum, and by the structure of the male genitalia.

Mysidia punctifera Metcalf

Mysidia punctifera Metcalf, 1938: 313. Holotype Q, PANAMA (MCZ) [examined].

Female: head 0.71 mm long, 0.92 mm wide; pronotum 2.00 mm wide; tegmen 9.35 mm long; wing 5.53 mm long. Male unknown.

Length of frons 7 times width at apex, 3 times width at base; ocelli large, not prominent; clypeus slightly longer than frons; rostrum terminating at level of hind coxae. Pronotal width 19 times mid-dorsal length; fronto-lateral carinae absent; tegula weakly carinate basally.

Genae each with a narrow, pale brown band extending from adjacent to midline of eye to anterior margin; ocelli pale; fronto-lateral surfaces of pronotum broadly pale orange from adjacent to eyes to lateral margins; disc of mesonotum irregularly brown posteriorly between lateral carinae; dorsal surface of abdomen devoid of dark markings. Tegmen and wing predominantly whitish hyaline; veins yellowish; cross-veins dark brown, narrowly edged dark smoky brown, Tegmen with costal cell irregularly mottled dark brown over basal half; radial, medial and cubital areas densely mottled dark brown and yellow over basal two-fifths; claval area narrowly dark brown basally, with a large, prominent, irregular, dark brown spot between apex and first branch of cubital vein; medial area at slightly distad of two-fifths length, and again at level of second fork, broadly and irregularly dark brown, the latter marking extending anteriorly to subcostal vein and, indistinctly, posteriorly to adjacent to claval apex; apical fork of medial vein with a large, prominent, dark brown spot; posterior and apical margins with small pale brownish spots intermittently between veins. Wing with a pale, indistinct, narrow, transverse brownish band at level of first fork of cubital vein; a large, indistinct, pale brown spot over fork of medial vein; a distinct, dark brown, roughly circular spot between first fork of cubital vein and claval suture at approximately midlength; posterior margin between anal veins and branches of cubital veins medially dark brown, the former very prominently so.

MATERIAL EXAMINED

Holotype Q, Panama: Canal Zone, Barro Colorado, 15.vii.1924 (Banks) (MCZ).

The antennae are unusually long, extending for one-half their length beyond anterior margins of genae. The species is also distinguished by the dark mottling and the prominent dark spot at the apex of the clavus of the tegmen.

Mysidia maculicosta Fowler

Mysidia maculicosta Fowler, 1900: 73. LECTOTYPE Q, GUATEMALA (BMNH), here designated [examined].

Female: head $0.75 \text{ mm} \log_{10} 0.88 \text{ mm}$ wide; pronotum 1.80 mm wide; tegmen $9.60 \text{ mm} \log_{10}$; wing $6.00 \text{ mm} \log_{10}$. Male unknown.

Length of frons 7.5 times width at apex, 2.66 yimes width at base; ocelli large, prominent; clypeus slightly shorter than frons; rostrum terminating immediately posterior to hind coxae. Pronotal width 30 times mid-dorsal length, fronto-lateral carinae absent; tegula distinctly carinate.

Genae reddish at level of dorsal margins of eyes; fronto-lateral surfaces of pronotum each with a broad, horizontal, reddish brown band extending from adjacent to eye to lateral margin; abdomen dorsally with a large dark brown spot at midline over first three segments. Tegmen and wing whitish hyaline, veins pale, cross-veins narrowly edged dark brown. Tegmen with costal margin irregularly brownish from base to level of first fork of cubital vein, this marking extending posteriorly to cover base of first branch of cubital vein; apical fork of medial vein covered by an irregular dark brown spot; clavus with a brown spot at apex; fifth and sixth branches of medial vein each with a brown spot near base; posterior margin weakly brownish between veins. Wing with irregular brownish markings on cross-veins and posterior margin.

MATERIAL EXAMINED

Lectotype Q, Guatemala: Pantaleon, 1700 ft (*Champion*) (BMNH).

There is also a male from Costa Rica in the type-series; it is very badly damaged, with the head, pronotum and right wing and tegmen missing, and it is very doubtful if it represents this species. The specimen here designated as lectotype bears Fowler's handwritten 'type' label. The species is distinguished by the pigmentation of the pronotum and abdomen.

Mysidia molesta sp. n.

(Figs 187, 297, 406)

Male: head 0.69 mm long, 1.01 mm wide; pronotum 2.14 mm wide; tegmen 9.35 mm long; wing 5.52 mm long. Female: tegmen 9.35–10.20 mm long.

Length of frons 6.5 times width at apex, 2.33 times width at base; ocelli small, obscure; clypeus slightly longer than frons; rostrum extending to base of subgenital plate. Pronotal width 17 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Disc of mesonotum with a large dark brown spot posteriorly. Tegmen and wing whitish hyaline, veins yellow, posterior and apical margins broadly smoky brown. Tegmen heavily mottled dark brownish, these markings coalescing to form irregular transverse bands at one-third and two-thirds length. Wing with branches of cubital vein broadly and irregularly edged smoky brown; apical third smoky brown over radial and medial veins.

Shaft of aedeagus broadly laterally expanded; apex strongly produced dorsally; dorsal surface subapically with a pair of large flap-like processes extending over lateral surfaces, each bearing a single, deeply bifurcate projection. Paramere very robust, greatly expanded dorso-ventrally, longitudinally folded towards midline; dorsal process situated at two-fifths length, ventrally directed, small, not posteriorly produced.

MATERIAL EXAMINED

Holotype \mathcal{O}^* , **Brazil**: Amazonas, P. das Laranjeiras, vii–viii.1981 (*Arias*) (INPA). Paratypes. 4 \mathcal{Q} , same data as holotype (INPA; BMNH).

Closely related to *estfarchina, molesta* is distinguished by the dark spot on the mesonotum and by the pigmentation of the tegmen and wing.

Mysidia obscura Metcalf

Mysidia obscura Metcalf, 1938: 317. Holotype Q, Ранама (USNM) [examined].

Male: head 0.84 mm long, 1.05 mm wide; pronotum 2.25 mm wide; tegmen 9.70 mm long; wing 5.44 mm long. Female: tegmen 11.05–12.00 mm long.

Length of frons c. 5.5 times width at apex, 3.5 times width at base; ocelli obsolete; clypeus slightly longer than frons; rostrum extending to subgenital plate. Pronotal width c. 14 times mid-dorsal length; frontolateral surfaces and tegula distinctly carinate.

Head and body unmarked. Tegmen and wing whitish hyaline, cross-veins and posterior and apical margins broadly edged smoky brown. Tegmen with central areas of cells irregularly smoky brown, these markings coalescing with those bordering cross-veins to form very irregular transverse bands. Wing with an irregular, smoky brown, transverse band at c. midlength, and another over radial-medial cross-vein.

Shaft of aedeagus very broad in lateral aspect; dorsal surface subapically with a pair of large, longitudinally aligned, dorsally directed, flap-like processes, each bearing a pair of short, robust, spine-like projections dorsally. Paramere slender; apex acutely rounded; dorsal process situated slightly distad of midlength, little produced posteriorly; dorsal surface subbasally with a blunt secondary process bearing robust spines.

MATERIAL EXAMINED

Holotype \mathcal{Q} , **Panama**: Porto Bello, 27.ii.1911 (*Busck*) (USNM). **Panama**: 1 \mathcal{O} , 1 \mathcal{Q} , Barro Colorado (CAS; BMNH).

This species is distinguished by its large size, the mottled appearance of the tegmina and wings, and by the structure of the male genitalia.

Mysidia henrietta sp. n.

(Figs 277, 388, 498)

Male: head 0.59 mm long, 0.73 mm wide; pronotum 1.57 mm wide; tegmen 7.65–8.10 mm long; wing 4.68 mm long. Female: tegmen 8.90 mm long.

Length of frons 8 times width at apex, twice width at base; ocelli small, indistinct; length of clypeus equal to that of frons; rostrum terminating at level of hind coxae. Pronotal width 19 times mid-dorsal length; fronto-lateral carinae obsolete; tegula distinctly carinate.

Genae each with a narrow reddish or dark brown band extending from adjacent to eye to anterior margin; fronto-lateral surfaces of pronotum each with a pale, often indistinct, horizontal band extending from midline of eye to lateral margin. Tegmen and wing whitish hyaline, cross-veins dark brown. Tegmen with a small, prominent, dark brown spot over apical fork of medial vein; a small, often indistinct, pale brown spot on clavus adjacent to junction of anal veins. Wing unmarked.

Male genitalia with shaft of acdeagus slender, broadest at midlength; dorsal surface subapically with a pair of apically bifurcate flap-like processes. Paramere massive; apex rounded; dorsal process situated at midlength, slender, strongly produced posteriorly.

MATERIAL EXAMINED

Holotype O, Brazil: Nietheroy, iv.1924 (Williams) (BMNH).

Paratypes. Brazil: 4 0, 7 9, same data as holotype; Itaparica; Bahia (BMNH; NR).

This species is readily distinguished by the pigmentation of the tegmen and wing, and by the structure of the male genitalia.

Mysidia distanti sp. n.

(Figs 174, 283, 392)

Male: head 0.59 mm long, 0.75 mm wide; pronotum 1.60 mm wide; tegmen 7.80–8.50 mm long; wing 4.70 mm long. Female: tegmen 8.90–10.00 mm long.

Length of frons c. 7.5 times width at apex, slightly less than 3 times width at base; ocelli distinct, not prominent; clypeus as long as frons; rostrum extending to base of subgenital plate. Pronotal width slightly greater than 19 times mid-dorsal length; fronto-lateral surfaces not carinate; tegula carinate basally.

Genae anterior to eyes often brownish; fronto-lateral surfaces of pronotum and tegula often orange at

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level of eyes; dorsal surface of abdomen seldom with two pairs of small dark brown spots adjacent to midline basally. Tegmen and wing almost hyaline, very weakly tinged whitish, veins yellowish; cross-veins dark brown, edged smoky brown; posterior and apical margins broadly smoky brown between veins. Tegmen weakly and irregularly mottled smoky brown between branches of medial and cubital veins; clavus often with a small dark brown spot level with point of fusion of anal veins; apical fork of medial vein narrowly and distinctly dark brown or black. Wing with radial-medial cross-vein and adjacent branches very dark brown.

Male genitalia with shaft of aedeagus broad in lateral aspect; dorsal surface at midlength with a pair of large flap-like processes extending almost to apex; lateral surfaces each with a flap-like process extending from subapically almost to base. Paramere robust; apex broadly rounded; dorsal process situated slightly distad of midlength, strongly curved postero-ventrally.

MATERIAL EXAMINED

Holotype \mathcal{O} , Honduras: Sta. B. 13 km SE. El Mochito, 22.vii.1977 (*O'Brien & Marshall*) (FAMU). Paratypes. Honduras: 2 \mathcal{O} , 3 \mathcal{Q} , same data as holotype (FAMU; BMNH). Belize: 1 \mathcal{O} , Belize Distr. (FAMU).

This species closely resembles *insolita*, but differs in the almost hyaline tegmina and wings, the dark pigmentation of the veins of the wing around the radial-medial cross-vein, and in the structure of the male genitalia.

Mysidia albicans Stål

(Figs 279, 390, 500)

Derbe albicans Stål, 1855: 191. LECTOTYPE O^{*}, BRAZIL (NR), here designated [examined]. Mysidia albicans (Stål) Stål 1856: 163.

Male: head 0.61 mm long, 0.71 mm wide; pronotum 2.40 mm wide; tegmen 8.40 mm long; wing 5.30 mm long. Female unknown.

Length of frons slightly less than 6 times width at apex, 2.25 times width at base; ocelli small, not prominent; length of clypeus one-fifth greater than that of frons; rostrum extending somewhat behind posterior coxae. Pronotal width 27 times mid-dorsal length; fronto-lateral surfaces not carinate.

Genae at level of eyes dull brownish; fronto-lateral surfaces of pronotum broadly and very indistinctly pale brown at level of eyes. Tegmen and wing whitish hyaline, veins pale yellow. Tegmen with cross-veins and branches of medial vein narrowly dark brown; clavus with a faint brownish spot subbasally, and another, more distant, spot adjacent to point of fusion of anal veins; costal cell with a small, dark brown spot at one-sixth length, and another at point of separation of subcostal and radial veins, the latter spot being somewhat fainter and extending transversely over medial vein; medial vein with a small, very prominent, roughly circular, dark brown/black spot over apical fork; a very faint and irregular, pale brownish, transverse band extending from costal margin to third branch of cubital vein slightly distad of midlength. Wing with radial-medial cross-vein brownish; very indistinctly mottled pale brown at level of first and second forks of cubital vein; a very irregular, broken, pale brownish, transverse band at level of fork of radial vein; an irregular, brownish spot between first branch of cubital vein and claval suture at two-thirds length of latter.

Male genitalia with shaft of aedeagus slender; lateral surfaces subapically each with a large, flap-like process extending over dorsal surface and produced anteriorly into an acute spine. Paramere robust; apex broadly rounded; dorsal process situated somewhat distad of midlength, strongly produced posteriorly; dorsal surface subbasally bearing numerous short, robust spines.

MATERIAL EXAMINED

Lectotype O, Brazil (Westerman) (NR).

The single specimen available for study is damaged and the tegulae are missing; it appears to be teneral but is believed to be free of distortion. In his description Stål did not cite the number of specimens, neither did he designate a holotype; the specimen listed above is here designated as lectotype.

Mysidia nemorensis sp. n.

(Figs 195, 305, 414)

Male: head 0.59 mm long, 0.86 mm wide; pronotum 1.95 mm wide; tegmen 7.91 mm long; wing 4.50 mm long. Female: tegmen 9.70 mm long.

Length of frons rather less than 5 times width at apex, slightly greater than twice width at base; ocelli small, distinct; clypeus one-quarter longer than frons; rostrum extending to base of subgenital plate. Pronotal width 22 times mid-dorsal length; fronto-lateral carinae obsolete; tegula with distinct carinae.

Fronto-lateral surfaces of pronotum usually each with a broad yellowish brown band extending horizontally from adjacent to eye to lateral margin. Tegmen and wing whitish hyaline, irregularly mottled smoky brown around forks of veins and cross-veins and on posterior and apical margins; veins pale brown. Tegmen with an irregular, smoky brown, transverse band at level of first fork of cubital vein. Wing unmarked.

Male genitalia with shaft of aedeagus broadly laterally expanded distad of midlength; dorsal surface subapically with a pair of large flap-like processes, broadening apically, each produced anteriorly and posteriorly into a long curving spine-like projection. Paramere robust; apex obtusely rounded; dorsal process situated at mid-length, not posteriorly produced.

MATERIAL EXAMINED

Holotype O', Surinam: Brokopondo, 30.i.1969 (O'Brien) (FAMU).

Paratypes. Surinam: 1 0[°], 2 Q, same data as holotype (FAMU; BMNH). Brazil: 11 0[°], 12 Q, Amazonas (INPA; BMNH).

Not readily distinguished by external characters, this species can be recognized most easily by the complex armature of the aedeagus and the undeveloped paramere.

Mysidia insolita sp. n.

(Figs 213, 323, 432)

Male: head 0.61 mm long, 0.75 mm wide; pronotum 1.95 mm wide; tegmen 6.80–8.10 mm long; wing 4.50 mm long. Female: tegmen 9.35 mm long.

Length of frons 6.5 times width at apex, slightly less than 2.5 times width at base; ocelli large, not prominent; clypeus slightly longer than frons; rostrum extending to base of subgenital plate. Pronotal width slightly less than 18 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Genae tinged orange-brown; fronto-lateral surfaces of pronotum each with a broad, horizontal, orange band extending from adjacent to eye to lateral margin. Tegmen and wing whitish hyaline, veins yellow; cross-veins brown, broadly edged smoky brown; posterior and apical margins broadly smoky brown between veins. Tegmen with costal and radial cells mottled brown; with an irregular, smoky brown, transverse band at one-quarter length; apical fork of medial vein narrowly very dark brown. Wing irregularly mottled smoky brown.

Male genitalia with shaft of aedeagus broad; dorsal surface subapically with a pair of large flap-like processes adjacent to midline and extending anteriorly to base. Paramere slender; apex acute; dorsal process situated at one-third length, produced postero-dorsally, with a ventrally directed lobe at midlength.

MATERIAL EXAMINED

Holotype \mathcal{O} , **Honduras**: Cortes, 27 km S. Potrerillos, 8.viii.1977 (*O'Brien & Marshall*) (FAMU). Paratypes. **Honduras**: 1 \mathcal{O} , same data as holotype (BMNH). **Belize**: 1 \mathcal{Q} , Altun Ha (FAMU).

Bearing a close superficial resemblance to *distanti*, this species is distinguished by the denser mottling of the tegmen and wing, the paler veins of the latter, and by the structure of the male genitalia.

Mysidia enjebetta sp. n.

(Figs 281, 289, 399)

Male: head 0.63 mm long, 0.80 mm wide; pronotum 1.70 mm wide; tegmen 7.90 mm long; wing 4.85 mm long. Female unknown.

Length of frons 6.5 times width at apex, slightly less than 3 times width at base; ocelli obsolete; clypeus as

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long as frons; rostrum terminating immediately posterior to hind coxae. Pronotal width 27 times mid-dorsal length; fronto-lateral surfaces not carinate; tegula weakly carinate.

Lateral carinae of frons tinged brownish at level of eyes; fronto-lateral surfaces of pronotum each with a broad orange band extending horizontally from adjacent to eye to lateral margin; lateral surfaces of mesonotum tinged crimson ventral to bases of tegmina. Tegmen and wing whitish hyaline; veins pale yellowish brown; cross-veins and forks of veins dark brown; posterior and apical margins smoky brown between veins. Tegmen with cross-veins broadly margined smoky brown; apical fork of medial vein very prominently dark brown; non-apical cells narrowly and irregularly pale smoky brown medially. Wing with irregularly spaced, roughly circular, smoky brown spots between cubital vein and claval suture; apical cells irregularly tinged smoky brown medially.

Male genitalia with shaft of aedeagus broad; dorsal surface subapically with a pair of very large, flap-like processes; lateral surfaces each with a very large, flap-like process over apical half length. Paramere with apex acutely rounded; dorsal process situated slightly basad of mid-length, strongly produced; dorsal surface at three-quarters length strongly and roundly produced into an internally directed secondary process.

MATERIAL EXAMINED

Holotype O', Mexico: Tepic, Nayarit, 13.iii.1957 (Dreisbach) (USNM).

This species is distinguished by the combination of pronotal and tegminal pigmentation, and by the structure of the male genitalia.

Mysidia nigrifrontalis sp. n.

(Figs 241, 352, 461)

Male: head 0.52 mm long, 0.65 mm wide; pronotum 1.30 mm wide; tegmen 6.55 mm long; wing 3.91 mm long. Female: tegmen 8.33–8.92 mm long.

Length of frons 5 times width at apex, c. 3 times width at base; ocelli very prominent; clypeus slightly shorter than frons; rostrum extending to base of pregenital segment. Pronotal width slightly greater than 12 times mid-dorsal length; fronto-lateral surfaces weakly carinate; tegula not carinate.

Ocelli scarlet; fronto-lateral surfaces of pronotum each with a very large dark brown/black marking, considerably broader than eye, tapering gradually from adjacent to eye to lateral margin; abdomen with a very large, circular, scarlet spot on dorsal surface subapically; metanotum suffused smoky brown on either side of scutellum. Tegmen and wing whitish hyaline, veins pale brown, cross-veins edged dark smoky brown, otherwise unmarked.

Male genitalia with shaft of aedeagus slender, parallel-sided in dorsal aspect, somewhat expanded subapically in lateral aspect; ventro-lateral surfaces each with a rounded lobe bearing small obtuse spines; dorsal surfaces with a pair of very large, rounded, flap-like processes subapically; lateral surfaces each with a single, long, bifurcate process subapically. Paramere robust; apex broadly rounded; dorsal process large, situated subapically, strongly produced posteriorly; dorsal surface over basal one-third length with numerous, short, robust spines; ventral surface over basal half length with numerous, long, slender spines.

MATERIAL EXAMINED

Holotype Q, **Panama**: Chiriqui, Fortuna, 82 15'W 8 44'N, 8.v.1978 (*O'Brien & Marshall*) (FAMU). Paratypes. 2 Q, same data as holotype (FAMU; BMNH).

This species is readily distinguished by the very striking pigmentation of the thorax and abdomen, and by the unique structure of the male genitalia.

Mysidia andes sp. n.

(Figs 258, 369, 479)

Male: head $0.73 \text{ mm} \log_{10} 1.05 \text{ mm}$ wide; pronotum 2.14 mm wide; tegmen $10.20-10.45 \text{ mm} \log_{10}$; wing $6.00 \text{ mm} \log$. Female unknown.

Length of frons 4.25 times width at apex, 3.33 times width at base; ocelli obsolete; clypeus as long as frons; rostrum extending to base of subgenital plate. Pronotal width c. 11 times mid-dorsal length; fronto-lateral surfaces not carinate; tegula weakly carinate.

Dorsal surfaces of pronotum tinged scarlet; disc of mesonotum dark brown posteriorly. Tegmen and wing smoky brown, veins brown, cells with hyaline spots medially; otherwise unmarked.

male genitalia with shaft of aedeagus robust, apically truncate; dorsal surface subapically with two pairs

of short, spine-like processes. Paramere slender; apex acutely rounded; dorsal process situated at two-thirds length, small, strongly produced posteriorly; dorsal surface basally with a rounded secondary process bearing short robust spines.

MATERIAL EXAMINED

Holotype O^{*}, **Bolivia**: La Paz, Rio Beni, San Buenaventura, 270 km, 22.iv.1979 (*Cooper*) (BMNH). Paratypes. **Bolivia**: 2 O^{*}, Prov. del Sara (*Steinbach*) (CM).

This species is distinguished by its large size, the pigmentation of the tegmina and wing, and by the very reduced armature of the aedeagus.

Mysidia bibula sp. n.

(Figs 209, 317, 428)

Male: head 0.63 mm long, 0.78 mm wide; pronotum 1.70 mm wide; tegmen 7.90–8.70 mm long; wing 5.10 mm long. Female: tegmen 8.80–9.40 mm long.

Length of frons c. 7 times width at apex, 2.5 times width at base; ocelli very large, prominent; length of clypeus slightly greater than that of frons; rostrum extending to base of subgenital segment. Pronotal width 18 times mid-dorsal length; fronto-lateral surfaces and tegula devoid of carinae.

Genae dorsad of ocelli and fronto-lateral surfaces of pronotum at level of eyes tinged orange; disc of mesonotum brownish yellow. Tegmen and wing whitish hyaline, lacking distinct dark markings; veins pale; tinged pale smoky brown around cross-veins and, irregularly, around veins, within cells, and adjacent to posterior and apical margins.

Male genitalia with shaft of aedeagus slender in lateral aspect; apex acute; dorsal surface subapically with a pair of large, flap-like processes, each terminating in a long, spine-like projection; lateral surfaces at three-fifths length each with a narrow, flap-like process. Paramere apically rounded; dorsal process situated at one-third length, slender, produced dorsally; dorsal surface at one-quarter length with a cluster of short, tooth-like spines.

MATERIAL EXAMINED

Holotype O^{*}, Panama: Las Cumbres, 14.v.1978 (O'Brien) (FAMU).

Paratypes. **Panama**: 8 ♂, 15 ♀, same data as holotype; Tocumen; Chorrera; Villa Real (FAMU; USNM; BMNH).

Though lacking distinctive external characters, this species may be distinguished by the structure of the aedeagus:

Mysidia ecuadoria sp. n.

(Figs 191, 301, 410)

Male: head $0.52 \text{ mm} \log_{10} 0.63 \text{ mm}$ wide; pronotum 1.32 mm wide; tegmen $6.37-7.31 \text{ mm} \log_{10}$; wing $4.10 \text{ mm} \log_{10}$ Female: tegmen 7.90 mm long.

Length of frons 6.5 times width at apex, 2.66 times width at base; ocelli not prominent; clypeus slightly shorter than frons; rostrum terminating at midlength of abdomen. Pronotal width c. 13 times mid-dorsal length; fronto-lateral surfaces not carinate; tegula with distinct carinae.

Fronto-lateral surfaces of pronotum each with a broad, horizontal, brown band extending from adjacent to eye to lateral margin. Tegmen and wing whitish hyaline. Tegmen with branches of medial and cubital veins dark brown, narrowly edged smoky brown; basal third of length mottled smoky brown. Wing with veins and cross-veins in apical half pale brown.

Male genitalia with shaft of aedeagus laterally expanded over apical two-fifths length; dorsal surface subapically with a pair of rounded flap-like processes adjacent to midline; ventral surface with a transverse process at two-thirds length. Paramere slender, apex acute; dorsal process slightly distad of midlength, not produced; dorsal surface near base with a rounded secondary process bearing numerous, long, robust spines.

MATERIAL EXAMINED

Holotype ♂, **Ecuador**: Mera, 1–2.ii.1923 (*Williams*) (BMNH). Paratypes. 9 ♂, 13 ♀, same data as holotype (BMNH).

This species is most readily distinguished by the male genitalia.

Mysidia cheesemani sp. n.

(Figs 194, 304, 413)

Male: head 0.59 mm long, 0.73 mm wide; pronotum 1.45 mm wide; tegmen 6.00–6.80 mm long; wing 3.40 mm long. Female: tegmen 6.40–7.60 mm long.

Length of frons 4 times width at apex, 2.5 times width at base; ocelli distinct; clypeus slightly shorter than frons; rostrum extending to midlength of subgenital plate. Pronotal width c. 13 times mid-dorsal length; fronto-lateral carinae distinct; tegula not carinate.

Head and body unmarked; abdomen occasionally tinged reddish dorsally. Tegmen and wing whitish hyaline, veins and cross-veins edged smoky brown, otherwise unmarked.

Male genitalia with shaft of aedeagus laterally expanded over apical half length; dorsal surface with a pair of transverse flap-like processes subapically; with a pair of long bifid processes at two-thirds length; a slender bifid process medially at two-fifths length. Paramere broad, shallowly concave apically; dorsal process small, situated at midlength, not posteriorly produced; ventral surface basally with a rounded lobe bearing long slender spines.

MATERIAL EXAMINED

Holotype O', Trinidad: Palo Seco, 21.ix.1919 (Williams) (BMNH).

Paratypes. Trinidad: 69 \bigcirc , 48 \bigcirc , same data as holotype; Caura, on *Parthenium* sp. (BMNH). Venezuela: 3 \bigcirc , Bolivar (BMNH). Guyana: 8 \bigcirc , 5 \bigcirc , Blairmont (BMNH).

External characters are unreliable in this species, and reference must be made to the male genitalia.

Mysidia augusta sp. n.

(Figs 184, 294, 403)

Male: head 0.46 mm long, 0.63 mm wide; pronotum 1.40 mm wide; tegmen 6.20–6.30 mm long; wing 3.57 mm long. Female: tegmen 7.00 mm long.

Length of frons 4 times width at apex, 3 times width at base; ocelli small, often obscure; length of clypeus c. three-quarters that of frons; rostrum extending to base of subgenital plate; fronto-lateral surfaces with carinae prominent; tegula not carinate.

Fronto-lateral surfaces of pronotum with carinae narrowly edged brownish. Tegmen and wing whitish hyaline, veins and cross-veins broadly edged smoky brown. Wing with irregular, smoky brown, transverse bands at one-half and three-quarters length.

Male genitalia with shaft of aedeagus slender in dorsal aspect, apex somewhat expanded; dorsal surface at midlength with a slender bifurcate process; lateral surfaces at three-quarters length each with a spine-like process extending anteriorly to base of dorsal process. Paramere robust; apex obtusely rounded; dorsal process situated slightly distad of midlength, little produced; dorsal surface at one-third length with an acute, hook-like, secondary process.

MATERIAL EXAMINED

Holotype ♂, **Peru**: Tingo Maria, Los Cuevos road, 2000 ft, 10.viii.1971 (*Broomfield*) (BMNH). Paratypes. **Peru**: 3 ♂, 1 ♀, Tingo Maria (BMNH; CAS).

Though not readily distinguished by external characters, this species can be recognized by the structure of the male genitalia.

Mysidia krameri sp. n.

(Figs 280, 327, 436)

Male: head 0.42 mm long, 0.71 mm wide; pronotum 1.36 mm wide; tegmen 6.40 mm long; wing 3.40 mm long. Female unknown.

Length of frons 6.5 times width at apex, 3 times width at base; ocelli small, not prominent; clypeus c. as long as frons; rostrum extending to apex of abdomen. Pronotal width 28 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Vertex with basal angles dark brown; ocelli pale; disc of mesonotum irregularly brownish. Tegmen and wing hyaline; veins pale yellow; cross-veins pale brown; both veins and cross-veins broadly edged smoky brown. Tegmen with a broad, irregular, brownish, transverse band extending from claval margin over first fork of cubital vein to costal margin at c. one-third length; with irregular smoky brown markings around

forks of medial vein; posterior and apical margins very broadly and indistinctly pale smoky brown. Wing with an indistinct smoky brown transverse band over radial-medial cross-vein.

Male genitalia with shaft of aedeagus slender; dorsal surface subapically with a pair of large flap-like processes adjacent to midline; ventral surface apically produced into a pair of rounded processes, numerous, very small, tooth-like spines laterally at three-quarters length. Paramere slender; apex obtusely rounded, produced into an acute hook-like process; dorsal process situated subapically, well developed; dorsal surface subbasally produced, bearing numerous long robust spines.

MATERIAL EXAMINED

Holotype O, Panama: Cerro Campana, 19.ix.1951 (Blanton) (USNM).

Though the male genitalia, in particular the aedeagus, resemble those of *lloydi*, the tegminal and wing pigmentation readily distinguish this species.

Mysidia erecta sp. n.

(Figs 201, 310, 419)

Male: head $0.63 \text{ mm} \log_{10} 0.82 \text{ mm}$ wide; pronotum 1.90 mm wide; tegmen $8.25-8.90 \text{ mm} \log_{10}$; wing $5.10 \text{ mm} \log_{10}$ Female unknown.

Length of frons 6 times width at apex, 2.5 times width at base; ocelli small; clypeus slightly longer than frons; rostrum extending to base of subgenital segment. Pronotal width 22 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Head and body unmarked. Tegmen and wing whitish hyaline, cross-veins broadly edged smoky brown, veins irregularly and intermittently edged smoky brown. Tegmen with an irregular, curving, brownish, transverse band at one-third length, and another over second fork of medial vein; apical and posterior margins broadly edged pale smoky brown. Wing with apical and posterior margins irregularly edged smoky brown.

Male genitalia with shaft of aedeagus very greatly laterally expanded; dorsal surface subapically with a pair of large, rounded, flap-like processes extending over lateral surfaces; a pair of long acute processes medially. Paramere very robust; apex obliquely truncate; dorsal process situated slightly basad of midlength, produced dorsally into a long, slender, spine-like projection.

MATERIAL EXAMINED

Holotype J, **Bolivia**: La Paz, Rio Beni, 270 m, San Buenaventura, 22.iv.1979 (*Cooper*) (BMNH). Paratype. **Columbia**: 1 J, Caqueta, Yuruyacu (BMNH).

This species, though lacking distinctive external characters, is readily distinguished by the dorsal extension of the paramere.

Mysidia maculosa sp. n.

(Figs 270, 381, 491)

Male: head 0.73 mm long, 0.71 mm wide; pronotum 1.60 mm wide; tegmen 8.33 mm long; wing 5.10 mm long. Female: tegmen 8.50 mm long.

Length of frons 6.5 times width at apex, c. 4 times width at base; ocelli large, prominent; clypeus slightly longer than frons; rostrum extending to base of subgenital plate. Pronotal width 13 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Head and body unmarked. Tegmen and wing whitish hyaline. Tegmen with branches of medial and cubital veins broadly edged smoky brown; basal third of length mottled smoky brownish. Wing with veins on apical half pale brownish.

Male genitalia with shaft of aedeagus somewhat swollen subapically; dorsal surface subapically with a pair of slender processes. Paramere very slender, constricted at one-third length, apex obtusely rounded; dorsal process situated slightly distad of one-third length, posteriorly produced; dorsal surface subbasally with a cluster of small robust spines; ventral surface over basal half length with numerous similar spines.

MATERIAL EXAMINED

Holotype O^{*}, Ecuador: Mera, 1–2.ii.1923 (*Williams*) (BMNH). Paratypes. Ecuador: 3 Q, Mera (BMNH).

This species is distinguished by its lack of tegminal and wing pigmentation, and by the very simple armature of the aedeagus.

Mysidia nebulosa (Germar)

(Figs 266, 377, 487)

Derbe nebulosa Germar, 1830: 56. Syntypes, BRAZIL [examined by L. B. O'Brien]. [Derbe pallida Fabricius; Spinola, 1839: 379. Misidentification.] Mysidia nebulosa (Germar) Schaum, 1850: 70.

Male: head $0.57 \text{ mm} \log_{10} 0.74 \text{ mm}$ wide; pronotum 1.58 mm wide; tegmen $7.20-7.85 \text{ mm} \log_{10}$; wing $4.10 \text{ mm} \log_{10}$ Female: tegmen $8.00-8.80 \text{ mm} \log_{10}$.

Length of frons c. 5 times width at apex, 2.25 times width at base; ocelli large, distinct; clypeus one-quarter longer than frons; rostrum extending to base of subgenital plate. Pronotal width 25 times mid-dorsal length; fronto-lateral surfaces and tegula not distinctly carinate.

Fronto-lateral surfaces of pronotum occasionally pale orange at level of eye; abdomen with dorsal surface often brown or orange. Tegmen and wing whitish hyaline; veins and cross-veins yellowish, irregularly and broadly edged smoky brown; posterior and apical margins broadly smoky brown between veins. Tegmen with basal third deeply mottled smoky brown. Wing unmarked.

Male genitalia with shaft of aedeagus laterally expanded over apical half; dorsal surface subapically with a pair of flap-like processes, each terminating dorsally in a laterally curving spine. Paramere robust; apex very obtusely rounded; dorsal process situated somewhat basad of midlength, very small, little produced posteriorly.

MATERIAL EXAMINED

Honduras: 22 \mathcal{O} , 13 \mathcal{Q} , Comayagua (FAMU; BMNH). Mexico: 1 \mathcal{Q} , Cintalapa (FAMU). Panama: 1 \mathcal{O} , Canal Zone (FAMU). Costa Rica: 1 \mathcal{O} , 2 \mathcal{Q} , Guan (FAMU; BMNH). Ecuador: 2 \mathcal{O} , 2 \mathcal{Q} , Tema (FAMU; BMNH).

Though this species was described from specimens from Brazil, the redescription above and the drawings of the male genitalia are based on the specimens from Honduras listed above; these specimens were compared with the type-material by Dr Lois B. O'Brien. The species is distinguished by the tesselated tegmen.

Mysidia bizzara sp. n.

(Figs 179, 288, 397)

Male: head 0.46 mm long, 0.65 mm wide; pronotum 1.30 mm wide; tegmen 6.80 mm long; wing 3.90 mm long. Female unknown.

Length of frons 6.5 times width at apex; 2.66 times width at base; ocelli distinct; clypeus slightly shorter than frons; rostrum extending to base of subgenital plate. Pronotal width c. 15 times length mid-dorsally; fronto-lateral surfaces and tegula not carinate.

Head and body unmarked. Tegmen and wing whitish hyaline, faintly smoky brown around cross-veins. Tegmen weakly mottled smoky brown over basal third, these markings coalescing to form a broad, irregular, transverse band over first fork of cubital vein. Wing unmarked.

Male genitalia with aedeagus greatly expanded laterally, widest at one-third length, dorso-ventrally compressed; dorsal surface subapically with a pair of flap-like processes extending over apical half. Paramere with apex very obtusely rounded; dorsal processes situated slightly distad of midlength; dorsal surface strongly produced apically; ventral surface slightly distad of midlength with a large internally directed lobe.

MATERIAL EXAMINED

Holotype O^{*}, **Bolivia**: Prov. del Sara (*Steinbach*) (CM).

The lack of distinctive external characters makes the determination of this species largely dependent upon examination of the male genitalia.

Mysidia intima sp. n.

(Figs 235, 347, 455)

Male: head 0.63 mm long, 0.84 mm wide; pronotum 1.65 mm wide; tegmen 7.70 mm long; wing 4.70 mm long. Female unknown.

Length of frons 4.5 times width at apex, 3 times width at base; ocelli obsolete; clypeus one-quarter longer

than frons; rostrum extending to base of subgenital plate. Pronotal width 20 times mid-dorsal length; fronto-lateral surfaces and tegula not distinctly carinate.

Head and body unmarked. Tegmen and wing hyaline, veins yellow, posterior and apical margins narrowly and weakly pale yellowish brown, tegmen otherwise unmarked. Wing with a very indistinct pale yellowish brown transverse band over radial-medial cross-vein, and an even fainter band at two-fifths length.

Male genitalia with shaft of aedeagus slender; dorsal surface subapically with a pair of long, slightly curving, spine-like processes adjacent to midline; lateral surfaces each with a slender spine-like process subapically. Paramere with apex broadly rounded; dorsal process situated at midlength, slender, strongly produced postero-dorsally.

MATERIAL EXAMINED

Holotype O', Brazil: Rio Negro, Umarituba, 22.iv.[?] (Roman) (NR).

This species is distinguished by the lack of pigmentation (even the wing markings are extremely faint) and by the simple spines on the aedeagus.

Mysidia infedelis sp. n.

(Figs 233, 344, 453)

Male: head 0.67 mm long, 0.92 mm wide; pronotum 1.90 mm wide; tegmen 8.50 mm long; wing 4.70 mm long. Female: tegmen 9.01 mm long.

Length of frons c. 5 times width at apex, 3.5 times width at base; ocelli obsolete; clypeus slightly longer than froms; rostrum extending to base of subgenital plate. Pronotal width 15 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Vertex, dorsal area and margins of frons dark brownish; dorsal and dorso-lateral surfaces of pronotum and tegula darker brownish. Tegmen bright yellowish hyaline, veins yellow, costal margin orange; anterior, apical and posterior margins regularly and narrowly dark smoky brown; claval margin unmarked. Wing with basal and claval areas hyaline, becoming tinged with yellow towards apex; veins yellow; posterior margins broadly and very distinctly edged dark smoky brown from first branch of cubital vein to apex; with a prominent, dark brownish, transverse band at level of apex of clavus, and another similar though rather oblique band at level of radial-medial cross-vein.

Male genitalia with shaft of aedeagus very slender in dorsal aspect; dorsal surface subapically with a pair of slender spines laterally, and a pair of long, somewhat overlapping, spine-like processes medially. Paramere slender; apex broadly rounded, with an acute, medially directed, hook-like projection dorsally; internal surface produced medially into a pair of acute, dorsally directed lobes; dorsal process situated at three-fifths length, slender, strongly produced postero-dorsally; dorsal surface subbasally somewhat produced.

MATERIAL EXAMINED

Holotype \mathcal{O} , **Brazil**: Amazonas, P. des Laranjeiras, viii.–ix.1981 (*Arias*) (INPA). Paratypes. 1 \mathcal{O} , 2 \mathcal{Q} , same data as holotype (INPA; BMNH).

This species is most readily distinguished by the yellowish pigmentation of the tegmen and by the dark transverse bands on the wing.

Mysidia testacea (Fabricius)

(Figs 273, 384, 494)

Derbe testacea Fabricius, 1803: 82. LECTOTYPE O, CENTRAL AMERICA (ZM), here designated [examined].

Mysidia testacea (Fabricius) Westwood, 1840: 83.

Mysidia citrina Walker, 1858: 98. Holotype O, BRAZIL (BMNH) [examined]. Syn. n.

Male: head $0.65 \text{ mm} \log_{10} 0.73 \text{ mm}$ wide; pronotum 1.42 mm wide; tegmen $6.43-7.65 \text{ mm} \log_{10}$; wing $4.42 \text{ mm} \log_{10}$. Female: tegmen $8.00 \text{ mm} \log_{10}$.

Length of frons c. 5 times width at apex, 3 times width at base; ocelli distinct; clypeus slightly longer than frons; rostrum extending to base of subgenital plate. Pronotal width 8.5 times mid-dorsal length; fronto-lateral surfaces and tegula with carinae obsolete.

Dorsal surfaces of head and body suffused scarlet. Tegmen and wing yellowish hyaline, posterior

margins broadly dark fuscus. Tegmen with costal vein narrowly scarlet. Wing with a prominent fuscous band extending obliquely from radial-medial cross-vein to apex of clavus.

Shaft of aedeagus slender in dorsal aspect; a pair of large flap-like processes enclosing ventral and lateral surfaces subapically; dorsal surface subapically with a pair of curving spine-like processes adjacent to midline. Paramere robust; apex obtusely rounded; dorsal process situated at three-fifths length, strongly produced posteriorly.

MATERIAL EXAMINED

Central America: 1 \circ (lectotype of *testacea*) (*Schmidt*) (ZM). **Brazil**: 1 \circ (holotype of *citrina*), Santarem (*Bates*) (BMNH).

Guyana: 1 O, Kartabo; 1 Q, no data (BMNH).

The tegmina of the *testacea* lectotype are missing, but its very distinctive wing pigmentation and the structure of the genitalia indicate that it is conspecific with *citrina*, thus confirming the synonymy of the latter.

Mysidia diabola sp. n.

(Figs 256, 367, 478)

Male: head 0.55 mm long, 0.67 mm wide; pronotum 1.30 mm wide; tegmen 6.00 mm long; wing 3.40 mm long. Female unknown.

Length of frons c. 7 times width at apex, twice width at base; ocelli small, distinct; clypeus slightly longer than frons; rostrum terminating just short of base of subgenital plate. Pronotal width 12.5 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Head with vertex and adjacent surfaces of genae pale orange; frons apically yellowish brown, crimson between lateral carinae ventrad to midline of eyes, reddish brown basally; clypeus dark reddish brown, median and lateral carinae pale crimson. Pronotum dark brown, broadly white along posterior and ventral margins at level of midline of eyes; tegular dark brown, ventral margins paler; mesonotum dark brown anteriorly and laterally, becoming paler towards posterior margin; ventro-lateral surfaces pale crimson; lateral margins of scutellum and dorsal surface of abdomen dark brown. Tegmen and wing yellowish hyaline, veins yellow, cross-veins broadly edged dark smoky brown. Tegmen with posterior and apical margins narrowly edged smoky brown; with a prominent, narrow, brown band extending from costal to posterior margin at one-third length; area around apices of branches of cubital vein broadly and irregularly dark brown; with a large, irregular, dark brown marking extending from costal margin to first branch of medial vein at between two-thirds and three-quarters length; apex smoky brown between first branch of radial vein and seventh branch of medial vein. Wing with a narrow, irregular, transverse, smoky brown band extending from first fork of cubital vein to posterior margin; a very broad, dark brown band extending from costal to posterior margins between one-half and three-quarters length; apex irregularly dark brown around apices of radial and medial veins.

Shaft of aedeagus with dorsal surface unarmed; lateral surfaces at *c*. two-thirds length each with a triangular flap-like process. Paramere slender; apex narrowly rounded; dorsal process situated slightly basad of three-quarters length, large, strongly produced dorsally and posteriorly; dorsal surface subapically produced, bearing several short robust spines.

MATERIAL EXAMINED

Holotype O', Brazil: Amazonas, P. das Laranjeiras, 5.viii.1981 (Arias) (INPA). Paratype. Brazil: 1 O', Amazonas (BMNH).

This species is readily distinguished by the pigmentation of the head, pronotum, tegmen and wing; the proportions of the head are also distinctive.

Mysidia lloydi sp. n.

(Figs 264, 375, 485)

Male: head 0.63 mm long, 0.76 mm wide; pronotum 1.36 mm wide; tegmen 6.80 mm long; wing 3.80 mm long. Female unknown.

Length of frons 6.5 times width at apex, 3.25 times width at base; ocelli small, not prominent; clypeus as long as frons; rostrum terminating at level of hind coxae. Pronotal width 13 times mid-dorsal length; fronto-lateral carinae distinct; tegula not carinate.

Head and body unmarked. Tegmen and wing whitish hyaline, veins pale brown. Tegmen with a narrow,

pale brownish, transverse band at one-third length; another, less distinct, at c. midlength. Wing with an indistinct, pale brown, transverse band over first fork of cubital vein, and another over radial-medial cross-vein.

Shaft of aedeagus slender in lateral aspect, somewhat laterally expanded; dorsal surface subapically with a pair of flap-like processes with apices acute and spine-like. Paramere broad; apex obtusely rounded; dorsal process situated at two-thirds length, produced postero-dorsally; dorsal surface somewhat produced subbasally into a rounded lobe bearing robust spines.

MATERIAL EXAMINED

Holotype O^{*}, Brazil: Para, Jabaty, v. 1924 (Williams) (BMNH).

Though this species closely resembles *josianna*, the proportions of the head and the structure of the male genitalia render it distinct.

Mysidia isteria sp. n.

(Figs 211, 321, 430)

Male: head 0.61 mm long, 0.90 mm wide; pronotum 1.95 mm wide; tegmen 8.50 mm long; wing 4.70 mm long. Female unknown.

Length of frons c. 5 times width at apex, c. 2.5 times width at base; ocelli small, obscure; clypeus one-fifth longer than frons; rostrum extending to base of subgenital plate. Pronotal width c. 19 times mid-dorsal length; fronto-lateral carinae absent; tegula prominently carinate.

Fronto-lateral surfaces of pronotum broadly pale orange at level of eyes. Tegmen and wing whitish hyaline; veins and cross-veins yellowish, cross-veins narrowly edged pale smoky brown. Tegmen with an indistinct, narrow, transverse, smoky brown band at one-third length; another, broader, but even fainter band immediately distad of midlength. Wing unmarked.

Shaft of aedeagus very short and broad; apex truncate; a pair of large flap-like processes extending over dorsal and lateral surfaces from apex almost to midlength, each bearing a single, long, spine-like process dorsally. Paramere very large in relation to aedeagus, slender, apex acute; dorsal process situated at slightly less than one-third length, large, not posteriorly produced; dorsal surface distad of midlength strongly produced and directed towards midline.

MATERIAL EXAMINED

Holotype O, Peru: Iquitos 5 km, Marine road, 24.xi.1972 (Wolda) (FAMU).

In the structure of the male genitalia this species most closely resembles *panamensis*, but in the proportions of the head and body, and in the detailed structure of the aedeagus, it is quite distinct.

Mysidia fuscomaculata sp. n.

(Figs 263, 374, 484)

Male: head 0.54 mm long, 0.60 mm wide; pronotum 1.47 mm wide; tegmen 6.80 mm long; wing 3.60 mm long. Female unknown.

Length of frons 9 times width at apex, c. twice width at base; ocelli obscure; clypeus as long as frons; rostrum extending to base of abdomen. Pronotal width 20 times mid-dorsal length; fronto-lateral carinae distinct.

Head and body unmarked. Tegmen and wing whitish hyaline, veins pale. Tegmen with a broad, smoky brown, transverse band extending from costal margin to apex of clavus; posterior margin very pale smoky brown. Wing very pale smoky brown on apical and posterior margins.

Shaft of aedeagus slender; dorsal surface subapically with a pair of flap-like processes laterally, each terminating in a long curving spine; lateral surfaces each with a small spine subapically. Paramere robust; dorsal process large, situated at two-thirds length, somewhat produced; dorsal surface at one-quarter length with a large rounded secondary process bearing numerous, large, robust spines.

MATERIAL EXAMINED

Holotype O', Panama: Cerro Campana, 2700 ft, 23.v.1978 (O'Brien & Marshall) (FAMU).

This species is distinguished by the tegminal pigmentation, apically very narrow frons, and by the structure of the male genitalia.

Mysidia adamare sp. n.

(Figs 221, 332, 441)

Male: head 0.63 mm long, 0.84 mm wide; pronotum 1.90 mm wide; tegmen 8.84 mm long; wing 5.10 mm long. Female unknown.

Length of frons 5.5 times width at apex, 2.33 times width at base; ocelli distinct; clypeus one-third longer than frons; rostrum extending to base of subgenital plate. Pronotal width 13 times mid-dorsal length, fronto-lateral surfaces not carinate; tegula distinctly carinate.

Fronto-lateral surfaces of pronotum each with a broad, horizontal, orange band extending from adjacent to eye to lateral margin; fore and mid femora narrowly scarlet apically. Tegmen and wing whitish hyaline, veins yellow. Tegmen with a faint, brownish, transverse band at one-seventh length; a broader, more prominent band slightly distad of one-quarter length; weaker, indistinct, bands over first and second forks of medial vein. Wing with a very pale, brownish, transverse band at midlength and another over radial-medial cross-vein.

Shaft of aedeagus slender; lateral surfaces each with a large flap-like process extending over dorsal surface and slightly overlapping at midline; dorsal surface subapically with a pair of large flap-like processes medially. Paramere extremely robust, almost circular in lateral aspect; dorsal processes small, situated slightly basad of midlength; dorsal surface subbasally with a large, rounded, secondary process bearing numerous robust spines.

MATERIAL EXAMINED

Holotype ♂, Brazil: Mato Grosso, 12°50'S 51°47'W, 16.iv.1968 (Richards) (BMNH).

This species is most readily distinguished by reference to the male genitalia, in particular to the very broadly rounded paramere.

Mysidia pallescens Metcalf

Mysidia pallescens Metcalf, 1938: 315. Holotype Q, PANAMA (MCZ) [examined].

Female: head 0.73 mm long, 0.88 mm wide; pronotum 2.05 mm wide; tegmen 8.70–9.35 mm long; wing 5.30 mm long. Male unknown.

Length of frons 5 times width at apex, 2.5 times width at base; ocelli small, distinct; clypeus c. as long as frons; rostrum extending almost to apex of subgenital plate. Pronotal width 34 times mid-dorsal length, fronto-lateral carinae absent; tegula distinctly carinate basally.

Genae adjacent to eyes brownish; posterior angle of mesonotal disc brownish. Tegmen and wing whitish hyaline, veins brownish yellow, veins and cross-veins irregularly edged smoky brown. Tegmen over c. basal third and over subcostal and medial cells mottled brownish; a distinct, smoky brown, transverse band over first fork of cubital vein; another, more irregular and less distinct, pale brownish, transverse band over second fork of medial vein; area between these bands, and between second band and apex, indistinctly and irregularly mottled pale brownish. Wing with a pale brown transverse band over first fork of cubital vein.

MATERIAL EXAMINED

Panama: 2 Q (holotype and paratype), Canal Zone, Barro Colorado, 17.vii.1924 (*Banks*) (MCZ); 3 Q, Canal Zone (FAMU; BMNH).

This species may be distinguished by the tegminal pigmentation, and by the relatively large head and broad pronotum.

Mysidia insania sp. n.

(Figs 265, 376, 486)

Male: head 0.67 mm long, 0.75 mm wide; pronotum 1.78 mm wide; tegmen 8.84 mm long; wing 4.93 mm long. Female unknown.

Length of frons 6 times width at apex, c. 2.5 times width at base; ocelli not prominent; clypeus one-fifth longer than frons; rostrum terminating slightly posterior to hind coxae. Pronotal width 28 times mid-dorsal length, fronto-lateral surfaces not carinate; tegula distinctly carinate.

Head and body unmarked. Tegmen and wing whitish hyaline. Tegmen with basal one-fifth length irregularly smoky brown; with a brownish transverse band at one-third length; another, more irregular band over medial-cubital cross-vein; and a third slightly distad of midlength, from thence to apex very pale

brownish; posterior margin tinged smoky brown. Wing with a very irregular, smoky brown, transverse band at midlength; apical third smoky brown.

Shaft of aedeagus slender, becoming greatly laterally expanded subapically; dorsal surface subapically with a pair of large, adpressed, flap-like processes, each terminating in a large curving spine. Paramere robust; apex broadly rounded; dorsal process situated slightly basad of midlength, weakly produced posteriorly.

MATERIAL EXAMINED

Holotype o, Ecuador: Morona, Santiago, Cordillera de Cutucu, 1000 m, 21.x.1978 (Cooper) (BMNH).

Though rather similar to some other species in external characters, the male genitalia show *insania* to be quite distinct.

Mysidia panamensis sp. n.

(Figs 210, 320, 429)

Male: head 0.53 mm long, 0.76 mm wide; pronotum 1.64 mm wide; tegmen 8.00 mm long; wing damaged. Female unknown.

Length of frons 4.5 times width at apex, 4 times width at base; ocelli very small, distinct; clypeus slightly longer than frons, rostrum extending to base of subgenital plate. Pronotal width 26 times mid-dorsal length, fronto-lateral carinae absent; tegula distinctly carinate.

Head and body unmarked. Tegmen and wing hyaline. Tegmen with a very faint, smoky brown, transverse band over first fork of cubital vein; another immediately distad of midlength; cross-veins very narrowly edged smoky brown. Wing with cross-veins very indistinctly edged smoky brown.

Shaft of aedeagus greatly expanded dorso-ventrally over apical half length; dorsal surface subapically with a pair of very large, hooked, processes. Paramere slender; apex acutely rounded; dorsal process situated at one-third length, not posteriorly produced.

MATERIAL EXAMINED

Holotype O', **Panama**: 6 miles E. Porto Bello, 6.ii.1930 (*Zschokke*) (CAS). Paratype. **Panama**: 1 O', Darien, Santa Fe (FAMU).

This species is readily distinguished by the combination of hyaline tegmina and wings, and by the massive structure of the aedeagus.

Mysidia formosa sp. n.

(Figs 246, 357, 467)

Male: head $0.53 \text{ mm} \log_{10} 0.67 \text{ mm}$ wide; pronotum 1.55 mm wide; tegmen $7.10 \text{ mm} \log_{10}$; wing $4.42 \text{ mm} \log_{10}$. Female unknown.

Length of frons c. 7 times width at apex, 2.25 times width at base; ocelli very large, prominent; clypeus one-quarter longer than frons; rostrum extending to base of subgenital plate. Pronotal width c. 12 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Genae anterior to eyes crimson; pronotum with posterior margins crimson. Tegmen and wing almost hyaline, veins dark brown. Tegmen weakly smoky brown over basal one-fifth length; with a broad, pale smoky brown, transverse band over first fork of cubital vein. Wing with a large, irregular, pale smoky brown spot on anal area at one-fifth length; first fork of cubital vein and radial-medial cross-vein broadly and weakly edged smoky brown.

Shaft of aedeagus very slender; apex strongly recurved over dorsal surface, partially obscuring a single pair of large flap-like processes, each of which bears a hook-like spine on the dorsal surface subapically. Paramere slender, strongly constricted at midlength; apex obtusely and irregularly rounded, bearing a hook-like process on the internal surface; dorsal process situated at four-fifths length, strongly produced dorsally and posteriorly; dorsal surface between one-quarter and one-third length with a prominent secondary process bearing numerous, short, robust spines.

MATERIAL EXAMINED

Holotype of, Venezuela: Carabobo, San Esteban, 8 km SE. Puerto Cabello, 100 m, 7.v.1978 (O'Brien & Marshall) (FAMU).

This species is readily distinguished by the unique pigmentation of the head, pronotum, tegmen and wing, and by the structure of the male genitalia.

Mysidia whimperi sp. n.

(Figs 272, 383, 493)

Male: head 0.53 mm long, 0.57 mm wide; pronotum 1.22 mm wide; tegmen 6.40 mm long; wing 3.40 mm long. Female unknown.

Length of frons c. 6 times width at apex, c. 4 times width at base; ocelli small, distinct; clypeus as long as frons; rostrum extending to base of subgenital plate. Pronotal width c. 12 times mid-dorsal length, fronto-lateral surfaces and tegula not distinctly carinate.

Fronto-lateral surfaces of pronotum adjacent to eyes, and disc of mesonotum, pale reddish brown. Tegmen and wing whitish hyaline. Tegmen with a faint, smoky brown, transverse band over first fork of cubital vein. Wing with an obscure, smoky brown, transverse band at midlength.

Shaft of aedeagus subapically expanded into a pair of flap-like processes extending over lateral and dorsal surfaces, each terminating antero-dorsally in a long spine. Paramere with apex obtusely rounded; dorsal process situated at three-fifths length, posteriorly produced; dorsal surface at one-fifth length with a small rounded secondary process bearing numerous short spines.

MATERIAL EXAMINED

Holotype O, Ecuador: 8 km NE. Puyo, 28.iv.1978 (O'Brien & Marshall) (FAMU).

The markings of the tegmina and wings are extremely faint, the species is therefore most readily determined by reference to the male genitalia.

Mysidia stali sp. n.

(Figs 200, 312, 421)

Male: head 0.61 mm long, 0.75 mm wide; pronotum 1.63 mm wide; tegmen 8.00 mm long; wing 4.10 mm long. Female unknown.

Length of from 5.5 times width at apex, c. 3 times width at base; ocelli distinct; clypeus slightly longer than froms; rostrum extending slightly beyond hind coxae. Pronotal width 13 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Head and body unmarked. Tegmen and wing whitish hyaline, veins yellow. Tegmen with costal margin broadly dark brown at c. one-quarter length; with a broad brownish band extending transversally over first fork of cubital vein to posterior margin. Wing with a very faint, indistinct, brownish, transverse band slightly distad of one-third length; and a more prominent band over radial-medial cross-vein.

Shaft of aedeagus slender; dorsal surface subapically with a pair of long spine-like processes; lateral surfaces subapically each with a spine-like process; ventral surface with a slender, narrowly bifurcate, process subbasally. Paramere with apex acute; dorsal process situated at *c*. midlength, produced dorsally; dorsal surface with a robust hook-like process subapically, subbasally with a low, rounded, secondary process bearing numerous short spines; ventral surface subbasally with very numerous, small, tooth-like spines.

MATERIAL EXAMINED

Holotype \mathcal{O}^{\dagger} , **Brazil**: Amazon, Rio Autaz (*Roman*) (NR). Paratypes. 1 \mathcal{O}^{\dagger} , 1 \mathcal{Q} , same data as holotype (NR; BMNH).

This species is distinguished by the tegminal pigmentation, the proportions of the head and pronotum, and by the structure of the male genitalia, especially the paramere.

Mysidia clava sp. n.

(Figs 242, 353, 462)

Male: head 0.48 mm long, 0.65 mm wide; pronotum 1.10 mm wide; tegmen 5.80 mm long; wing 3.40 mm long. Female unknown.

Length of frons 7 times width at apex, 2.33 times width at base; ocelli small, obscure; clypeus c. as long as frons; rostrum extending to base of subgenital plate. Pronotal width c. 18 times mid-dorsal length; fronto-lateral surfaces and tegula with carinae weak or obsolete.

Fronto-lateral surfaces of pronotum each with a narrow, bright orange band extending horizontally from adjacent to midline of eye to lateral margin. Tegmen and wing whitish hyaline. Tegmen with a narrow, very faint, transverse, smoky brown band over first fork of claval vein; an irregular, pale, smoky brown area adjacent to apex of clavus. Wing with posterior and apical margins pale brownish grey.

Shaft of aedeagus very slender, gradually tapering over c. basal half length, somewhat expanded towards apex; ventral surface bearing numerous transverse rows of small blunt spines; lateral margins each with a long hooked process at three-quarters length; dorsal surface with a pair of slender processes at two-thirds length, a large, flap-like, bifurcate process at midline. Paramere slender; dorsal process situated slightly distad of midlength, posteriorly produced; dorsal surface subbasally with a rounded secondary process bearing numerous robust spines.

MATERIAL EXAMINED

Holotype O, Brazil: Belem, Para, v.1924 (Williams) (BMNH).

Its small size, relative lack of tegminal pigmentation, and the structure of the male genitalia readily distinguish this species.

Mysidia simpla sp. n.

(Figs 222, 333, 442)

Male: head 0.53 mm long, 0.73 mm wide; pronotum 1.43 mm wide; tegmen 6.80–7.40 mm long; wing 4.16 mm long. Female: tegmen 7.60–8.50 mm long.

Length of frons 6.25 times width at apex, 3.33 times width at base; ocelli small, obscure; clypeus as long as frons; rostrum extending to base of subgenital plate. Pronotal width c. 14 times mid-dorsal length, fronto-lateral carinae distinct; tegulae not carinate.

Lateral carinae of frons often brownish; apex of disc of mesonotum occasionally reddish. Tegmen and wing pale brownish hyaline, veing pale brown. Tegmen pale brown basally; a brownish transverse band at one-third length; a fainter band at midlength. Wing with a pale brownish transverse band over first fork of cubital vein, another over radial-medial cross-vein.

Shaft of aedeagus slender; dorsal surface subapically with a pair of parallel flap-like processes. Paramere slender; dorsal process situated at three-fifths length, small, posteriorly produced; dorsal surface subbasally with a small conical secondary process bearing robust spines.

MATERIAL EXAMINED

Holotype o^{*}, **Ecuador**: Tena, 4.iv.1923 (*Williams*) (BMNH). Paratypes, **Ecuador**: 1 o^{*}, 2 Q, 18 km S. Tena (FAMU; BMNH).

Though this species closely resembles *lloydi*, the proportions of the head, and the very reduced armature of the aedeagus render it distinct.

Mysidia nigrithorax sp. n.

(Figs 231, 342, 451)

Male: head 0.57 mm long, 0.82 mm wide; pronotum 1.50 mm wide; tegmen 7.65 mm long; wing 3.80 mm long. Female: tegmen 8.00 mm long.

Length of frons c. 5 times width at apex, 3 times width at base; ocelli prominent; clypeus slightly longer than frons; rostrum extending almost to base of subgenital plate. Pronotal width 10 times mid-dorsal length; fronto-lateral surfaces and tegulae not carinate.

Ocelli scarlet; disc of mesonotum dark brown; dorsal surface of abdomen brown. Tegmen and wing whitish hyaline, posterior and apical margins broadly smoky brown. Tegmen with a narrow, transverse, brownish band over first fork of cubital vein, another much broader band at midlength. Wing with a narrow, transverse, brownish band at midlength, apex broadly smoky brown.

Shaft of aedeagus somewhat expanded subapically; dorsal surface subapically with a pair of very long spine-like processes, a pair of much shorter spines, and laterally a pair of narrow flap-like processes. Paramere very slender; apex narrowly rounded; dorsal process situated at three-fifths length, slender, posteriorly produced; dorsal surface subbasally with a rounded secondary process bearing numerous short robust spines; ventral surface at midlength with a low flap-like process.

MATERIAL EXAMINED

Holotype ♂, **Peru**: Tingo Maria, 13.vii.1968 (*O'Brien*) (FAMU). Paratypes. 1 ♂, 3 ♀, same data as holotype (FAMU; BMNH).

This species is distinguished by the pigmentation and by the structure of the male genitalia.

Mysidia subfusca Metcalf

Mysidia subfusca Metcalf, 1938: 315. Holotype Q, PANAMA (MCZ) [examined].

Female: head $0.69 \text{ mm} \log_{10} 0.88 \text{ mm}$ wide; pronotum 1.72 mm wide; tegmen $8.85 \text{ mm} \log_{10} \text{ subscripts}$ wing $5.00 \text{ mm} \log_{10} \text{ Male}$ unknown.

Length of froms 8 times width at apex, 3.5 times width at base; ocelli large, distinct; clypeus c. as long as frons; rostrum extending almost to base of subgenital plate. Pronotal width c. 13 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Head and pronotum weakly tinged reddish. Tegmen and wing whitish hyaline, veins and cross-veins yellowish brown. Tegmen irregularly smoky brown over basal one-fifth length; with a narrow, smoky brown, transverse band immediately distad of first fork of cubital vein; broadly, irregularly, and faintly brownish from immediately distad of second fork of cubital vein to *c*. three-fifths length; apical one-third length irregularly pale smoky brownish. Wing with a very pale, smoky brown, transverse band over first fork of cubital vein, another over radial-medial cross-vein.

MATERIAL EXAMINED

Holotype Q, Panama: C.Z., Barro Colorado, 26.vi.1924 (Banks) (MCZ).

This species is very close to *pallescens* from which, in the absence of male genitalia for comparison, it is most readily distinguished by the proportions of the head and pronotum, and by the two transverse bands on the tegmen.

Mysidia estfarchina sp. n.

(Figs 212, 322, 431)

Male: head $0.63 \text{ mm} \log_{10} 1.01 \text{ mm}$ wide; pronotum 2.00 mm wide; tegmen $9.35-10.20 \text{ mm} \log_{10}$; wing $5.10 \text{ mm} \log_{10}$ Female unknown.

Length of frons c. 6 times width at apex, c. 2.5 times width at base; ocelli small, distinct; clypeus slightly longer than frons; rostrum extending to base of subgenital plate. Pronotal width 12 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Head and body unmarked. Tegmen and wing basally hyaline, veins pale, posterior and apical margins broadly and irregularly smoky brown between apices of veins, cross-veins narrowly edged smoky brown. Tegmen with an irregular, pale brownish, transverse band slightly basad of one-third length; another, more broken and paler band at midlength. Wing lacking distinct transverse markings; branches of veins irregularly edged smoky brown.

Shaft of aedeagus massively expanded subapically; dorsal surface subapically with a pair of very large, flap-like, apically acute and strongly diverging processes adjacent to midline; lateral surfaces subapically each with a large flap-like process extending over ventral surface. Paramere robust; apex acute; dorsal process situated slightly distad of one-third length, not posteriorly produced; dorsal surface strongly produced and inclined towards midline; ventro-lateral surface subbasally with very numerous, tiny, tooth-like spines.

MATERIAL EXAMINED

Holotype O', **Brazil**: Amazonas, P. das Laranjeiras, 30.vii.1981 (*Arias*) (INPA). Paratypes. 5 O', same data as holotype (INPA; BMNH; NR).

This species is distinguished by the pigmentation of the tegmina and wing, and by the structure of the male genitalia.

Mysidia subfasciata Westwood

Mysidia subfasciata Westwood, 1840: 83. LECTOTYPE (? sex), BRAZIL (BMNH), here designated [examined].

Head 0.62 mm long, 0.80 mm wide; pronotum 1.78 mm wide; tegmen 8.75 mm long; wing 4.85 mm long. The abdomen is missing, and the sex of the unique type-specimen is therefore unknown.

Length of frons 10 times width at apex, 3.33 times width at base; ocelli small, distinct; clypeus slightly shorter than frons; rostrum damaged. Pronotal width 28 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Head and body unmarked. Tegmen and wing whitish hyaline, veins and cross-veins yellowish. Tegmen with an indistinct very pale brown spot over cubital vein at midlength between base and first fork; a faint,

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irregular, pale brown, transverse band over first fork of cubital vein; a very faint and indistinct, pale brown transverse band over first fork of medial vein. Wing lacking distinct markings.

MATERIAL EXAMINED

Lectotype, Brazil: Para [?] (Burchell [?]) (BMNH).

This is the only specimen available for study, and the abdomen is missing and the rostrum damaged; it bears Westwood's handwritten determination label. The species is distinguished by the very narrow frons and the tegminal markings.

Mysidia fasciata Metcalf

(Figs 225, 336, 446)

Mysidia fasciata Metcalf, 1938: 314. Holotype Q, Ранама (MCZ).

Male: head $0.67 \text{ mm} \log_{10} 0.80 \text{ mm}$ wide; pronotum 1.68 mm wide; tegmen $7.20-7.65 \text{ mm} \log_{10}$; wing $4.10 \text{ mm} \log_{10}$ Female: tegmen $7.20-8.50 \text{ mm} \log_{10}$.

Length of frons 7 times width at apex, c. 3 times width at base; ocelli distinct; clypeus one-sixth longer than frons; rostrum extending to base of subgenital plate. Pronotal width 10 times mid-dorsal length; fronto-lateral surfaces and carinae not carinate.

Ocelli narrowly edged crimson; disc of mesonotum often deep yellowish brown, occasionally with a narrow, longitudinal, dark brown band on either side of midline; fronto-lateral surfaces of pronotum rarely distinctly crimson; dorsal surface of abdomen rarely tinged reddish. Tegmen and wing whitish hyaline. Tegmen with veins and cross-veins brown; costal area pale smoky brown; claval area dark brown; a narrow, dark brown, transverse band over first fork of cubital vein; a broader, paler, less distinct, smoky brown, transverse band between first and second forks of medial vein; slightly less than apical one-half length entirely smoky greyish brown. Wing with posterior and apical margins broadly smoky brown; a dark brown; a dark brownish transverse band at *c*. three-quarters length.

Shaft of aedeagus slender; dorsal surface subapically with a pair of large, finely serrated, flap-like processes extending to just short of midlength; ventro-lateral surfaces each with a ventrally directed flap-like process at three-quarters length. Paramere basally slender, broadening abruptly to very obtusely rounded apex; dorsal process situated slightly distad of midlength, produced postero-ventrally.

MATERIAL EXAMINED

Allotype O', Panama: C.Z., Barro Colorado, 21.vi.1924 (Banks) (MCZ).

Panama: 14 O⁷, 7 Q, various localities in Canal Zone (USNM; CAS; FAMU; BMNH).

The genitalia of the allotype are damaged, and a preparation was not made of this specimen. The tegminal and wing markings of this species are distinctive.

Mysidia douglasi sp. n.

(Figs 178, 287, 396).

Male: head 0.50 mm long, 0.67 mm wide; pronotum 1.32 mm wide; tegmen 6.97 mm long; wing 3.77 mm long. Female unknown.

Length of frons c. 8 times width at apex, c. 3 times width at base; ocelli large, distinct; clypeus slightly longer than frons; rostrum extending to apex of abdomen. Pronotal width 21 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Head and body unmarked. Tegmen and wing whitish hyaline. Tegmen with a pale brownish transverse band over first fork of cubital vein; another similar band at midlength. Wing with a pale brown transverse band over first fork of cubital vein and another over radial-medial cross-vein.

Shaft of aedeagus greatly expanded laterally; dorsal surface subapically with a pair of long, adpressed, flap-like processes, each terminating in an acute spine; a pair of small triangular processes at midline immediately distad of midlength. Paramere with apex obtusely rounded; dorsal process large, situated slightly distad of midlength, posteriorly produced; ventral surface at two-thirds length with a small hook-like process.

MATERIAL EXAMINED

Holotype O^{*}, Panama: Gatun Lake, x.1931 (*Zschokke*) (CAS).

The external characters alone are not considered sufficient for the positive determination of this species; reference should therefore be made to the male genitalia.

Mysidia knighti sp. n.

(Figs 203, 313, 422)

Male: head 0.53 mm long, 0.68 mm wide; pronotum 1.15 mm wide; tegmen 6.05 mm long; wing 3.40 mm long. Female unknown.

Length of frons 4.5 times width at apex, c. 3 times width at base; ocelli very large, prominent; clypeus slightly longer than frons; rostrum extending to apex of abdomen. Pronotal width 10 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Head and body unmarked. Tegmen and wing whitish hyaline, veins pale. Tegmen with a prominent, broad, dark brown, transverse band extending from costal margin to claval suture over first fork of cubital vein; a paler, less distinct, more irregular, smoky brown band over radial-medial cross-vein. Wing with a faint, irregular, pale smoky brown, transverse band at midlength and at three-quarters.

Shaft of aedeagus very slender; dorsal surface subapically with two pairs of long spine-like processes; ventral surface with two longitudinal rows of small obtuse spines. Paramere slender, medially constricted, apex obtusely rounded; dorsal process situated at two-thirds length, strongly produced posteriorly; dorsal surface subbasally with a large rounded secondary process bearing numerous small robust spines.

MATERIAL EXAMINED

Holotype O, Brazil: Mato Grosso, 12°49'S 51°45'W, 18.xii.1968 (Knight) (BMNH).

Very similar to *pulchella*, this species is distinguished by the pale apex to the wing and by the structure of the paramere.

Mysidia pulchella sp. n.

(Figs 176, 285, 394)

Male: head 0.53 mm long, 0.70 mm wide; pronotum 1.26 mm wide; tegmen 6.40 mm long; wing 3.57 mm long. Female unknown.

Length of frons slightly greater than 4.5 times width at apex, 3 times width at base; ocelli large, prominent; clypeus as long as frons; rostrum extending little beyond hind coxae. Pronotal width 12 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Head and body unmarked; ocelli broadly and irregularly edged scarlet. Tegmen and wing whitish hyaline, veins pale. Tegmen with a prominent, broad, dark brown, transverse band extending from costal to posterior margins over first fork of cubital vein; another over radial-medial cross-vein. Wing with a pale, irregular, smoky brown, transverse band extending from first fork of cubital vein to posterior margin; apical one-quarter length broadly pale smoky brown.

Shaft of aedeagus slender; dorsal surface subapically with two pairs of large spine-like processes; ventral surface at two-thirds length with a cluster of small obtuse spines. Paramere very slender, strongly constricted subbasally; dorsal process small, situated somewhat basad of midlength, little produced posteriorly; dorsal surface subbasally with a slender secondary process bearing numerous small robust spines; ventral surface at one-third length with a slender process bearing numerous robust spines.

MATERIAL EXAMINED

Holotype O', Brazil: Mato Grosso, 12°50'S 51°47'W, 17.x.1968 (Richards) (BMNH).

Though very similar to the preceding species, *pulchella* is distinguished by the markings of the wing and by the structure of the paramere.

Mysidia distincta sp. n.

(Figs 271, 382, 492)

Male: head 0.73 mm long, 0.88 mm wide; pronotum 2.00 mm wide; tegmen 9.40–10.20 mm long; wing 5.95 mm long. Female: tegmen 11.56 mm long.

Length of from 5.5 times width at apex, c. 3 times width at base; ocelli small, distinct; clypeus c. one-fifth longer than froms; rostrum extending to base of subgenital plate. Pronotal width 47 times mid-dorsal length, fronto-lateral carinae absent; tegula weakly carinate.

Genae brown level with anterior margins of eyes; ocelli narrowly edged scarlet; disc of mesonotum commonly dark brown. Tegmen and wing whitish hyaline. Tegmen pale smoky brown basally; a distinct, brownish, transverse band at c. one-third length, another at midlength; area between these bands with a

much fainter, indistinct, transverse band medially; posterior margin very pale brownish. Wing weakly and indistinctly pale brown over cross-veins; posterior margin very faintly pale brownish.

Shaft of aedeagus broadly laterally expanded over apical one-half length; dorsal surface with a pair of flap-like processes over apical two-fifths length, a pair of very long hook-like processes subapically. Paramere robust, apically truncate; dorsal process situated somewhat basad of midlength, strongly produced posteriorly.

MATERIAL EXAMINED

Holotype O, Peru: Callanga (BMNH).

Paratypes. 10° , 29, same data as holotype (BMNH).

The dark brown mesonotal disc, the tegminal pigmentation, and the structure of the male genitalia distinguish this species.

Mysidia hengist sp. n.

(Figs 252, 363, 474)

Male: head $0.57 \text{ mm} \log_{10} 0.76 \text{ mm}$ wide; pronotum 1.53 mm wide; tegmen $7.32-7.90 \text{ mm} \log_{10}$; wing $4.00 \text{ mm} \log_{10}$ Female: tegmen $8.15 \text{ mm} \log_{10}$.

Length of frons, slightly less than 7 times width at apex, slightly less than twice width at base; ocelli small, obscure; clypeus one-quarter longer than frons; rostrum extending to base of subgenital plate. Pronotal width 37 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Head and body unmarked. Tegmen and wing hyaline, veins pale yellow. Tegmen with a smoky brown transverse band extending from costal margin to apex of anal vein between first and second forks of cubital vein; another much fainter and irregular band extending from medial-cubital cross-vein to posterior margin; another pale band extending from costal to posterior margins at level of second fork of medial vein; posterior margin narrowly and very indistinctly tinged smoky brown between branches of cubital vein. Wing with a pale smoky brown, transverse band extending from costal to posterior margin at level of first fork of cubital vein; another slightly darker band extending obliquely from around radial-medial cross-vein to posterior margin; posterior and apical margins faintly smoky brown between veins.

Shaft of aedeagus broad; lateral surfaces subapically each with a large flap-like process extending over dorsal surface and strongly overlapping at mid-dorsal line, each process bearing a long, slightly curving spine on its antero-dorsal surface, and a somewhat shorter spine on its posterior margin. Paramere very robust; apex very obtusely rounded, somewhat produced dorsally; dorsal process situated at midlength, little produced.

MATERIAL EXAMINED

Holotype o^{*}, **Brazil**: Amazonas, P. das Laranjeiras, 30.vii.1981 (*Arias*) (INPA). Paratypes. 2 o^{*}, 1 Q, same data as holotype (INPA; BMNH).

This species is distinguished by the pigmentation of the tegmina and wings, and by the structure of the aedeagus.

Mysidia josianna sp. n.

(Figs 240, 351, 460)

Male: head 0.59 mm long, 0.80 mm wide; pronotum 1.75 mm wide; tegmen 7.10–8.15 mm long; wing 4.10 mm long. Female unknown.

Length of frons 5.5 times width at apex, 2.5 times width at base; ocelli small, distinct; clypeus as long as frons; rostrum extending to subgenital plate. Pronotal width 35 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Head and body unmarked. Tegmen and wing whitish hyaline, veins pale brown. Tegmen pale smoky brown over basal half length; a broad, dark brown, transverse band immediately basad of second fork of cubital vein; another somewhat fainter band over medial-cubital cross-vein; occasionally another very faint and indistinct band immediately distad of midlength; posterior margin between branches of cubital vein and first branch of medial vein edged smoky brown. Wing with cross-veins and forks of veins irregularly edged pale smoky brown; posterior margin between branches of cubital vein broadly smoky brown.

Shaft of aedeagus laterally expanded over apical three-fifths length; lateral surfaces subapically each with a large flap-like process bearing a long acute spine; dorsal surface with a single, medial, spine-like

process slightly distad of midlength. Paramere slender; dorsal process situated slightly basad of midlength, well developed.

MATERIAL EXAMINED

Holotype O', Trinidad: Arima Valley, Arima 10 miles, 15.vii.1976 (Noyes) (BMNH).

Paratypes. Trinidad: 3 o^{*}, Mount Tucuche and Aripo Valley (BMNH). Brazil: 1 o^{*}, Para, Jabaty (BMNH).

This species, lacking definitive external characters, is readily distinguished by the structure of the male genitalia.

Mysidia pseudoerecta sp. n.

(Figs 202, 311, 420)

Male: head 0.65 mm long, 0.90 mm wide; pronotum 1.90 mm wide; tegmen 8.50 mm long; wing 5.00 mm long. Female unknown.

Length of frons 6 times width at apex, 2.5 times width at base; ocelli small, obscure; clypeus slightly longer than frons; rostrum extending somewhat beyond posterior coxae. Pronotal width 25 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Disc of mesonotum with a roughly circular dark brown spot medially. Tegmen and wing clear hyaline, veins pale yellow. Tegmen with posterior and apical margins broadly pale smoky brown; a pale smoky brown spot in angle of anal veins at point of fusion; another similar spot on cubital vein at midlength between base and first fork; a distinct brown transverse band immediately basad of one-third length; a paler, irregular, less distinct band at level of medial-cubital cross-vein; a rather more distinct transverse band at level of second fork of medial vein. Wing with posterior and apical margins broadly pale smoky brown; a weak, very irregular, broken, smoky brown transverse band somewhat basad of midlength; an even less distinct smoky marking around medial-cubital cross-vein, extending to posterior margin; a transverse band extending from radial-medial cross-vein to posterior margin.

Shaft of aedeagus considerably expanded laterally over apical one-third length; lateral surfaces subapically each with a large flap-like process extending over dorsal surface and terminating anteriorly in a slender spine. Paramere robust, apex broadly rounded; dorsal process situated at *c*. midlength, slender, greatly produced vertically, apex acute and narrowly recurved.

MATERIAL EXAMINED

Holotype O, Brazil: Amazonas, P. das Laranjeiras, viii.-ix.1981 (Arias) (INPA).

The paramere and aedeagus of this species closely resemble those of *erecta*, but the tegminal and wing pigmentation are quite distinct.

Mysidia perspicua sp. n.

(Figs 267, 378, 488)

Male: head 0.61 mm long, 0.78 mm wide; pronotum 1.47 mm wide; tegmen 7.65 mm long; wing 3.83 mm long. Female unknown.

Length of frons 8 times width at apex, 2.5 times width at base; ocelli small, obscure; clypeus one-quarter longer than frons; rostrum terminating immediately posterior to hind coxae. Pronotal width 14 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Fronto-lateral surfaces of pronotum each with a broad pale orange band extending horizontally from adjacent to eye to lateral margin. Tegmen and wing whitish hyaline, veins pale brown. Tegmen with a very faint, smoky brown, transverse band at one-third length; another less distinct band slightly distad of midlength. Wing unmarked.

Shaft of aedeagus greatly expanded subapically; dorsal surface subapically with a pair of very large flap-like processes, each terminating anteriorly in a large spine-like projection. Paramere very broad, apex obtusely rounded; dorsal process situated at midlength, strongly produced posteriorly.

MATERIAL EXAMINED

Holotype O, Brazil: Para, Jabaty, v.1924 (Williams) (BMNH).

Though externally very similar to *simpla*, this species is readily distinguished by the structure of the male genitalia.

Mysidia agilis sp. n.

(Figs 190, 300, 409)

Male: head 0.52 mm long, 0.65 mm wide; pronotum 1.15 mm wide; tegmen 5.40–5.95 mm long; wing 3.40 mm long. Female: tegmen 5.50 mm long.

Length of frons 7 times width at apex, slightly greater than twice width at base; ocelli small, not prominent; clypeus one-quarter longer than frons; rostrum extending to base of subgenital segment. Pronotal width 11 times mid-dorsal length; fronto-lateral surfaces and tegula not distinctly carinate.

Head and body unmarked. Tegmen and wing hyaline, only very weakly tinged whitish. Tegmen with a faint, transverse, smoky brown band at level of first fork of cubital vein; another less distinct, more irregular band immediately distad of mid-length; a very indistinct and irregular band over apical branches of medial vein; cross-veins weakly edged smoky brown. Wing with a prominent, transverse, smoky-brown band at level of radial-medial cross-vein; posterior and apical margins broadly smoky brown.

Shaft of aedeagus ventrally and laterally expanded apically, with a pair of slender processes dorsally; dorsal surface subapically with a large flap-like process at midline, a pair of slender, spine-like processes laterally. Paramere broad, robust; apex obtusely rounded; dorsal process situated slightly distad of midlength, apex vertically directed, not produced posteriorly.

MATERIAL EXAMINED

Holotype O', Guyana: Tumatumari, 19. vii. 1923 (Williams) (BMNH).

Paratypes. Brazil: 1 0, 2 9, Amazonas, P. das Laranjeiras (INPA; BMNH).

The structure of the male genitalia is very distinctive in this species; the heavily armed aedeagus coupled with the relatively undeveloped paramere, and the pigmentation of the tegmen and wing render it easily distinguishable.

Mysidia claudata sp. n.

(Figs 175, 284, 393)

Male: head $0.50 \text{ mm} \log_{10} 0.74 \text{ mm}$ wide; pronotum 1.26 mm wide; tegmen $5.60-6.03 \text{ mm} \log_{10}$; wing $3.45 \text{ mm} \log_{10}$. Female: tegmen $6.12-6.80 \text{ mm} \log_{10}$.

Length of frons c. 6 times width at apex, twice width at base; ocelli small, obscure; clypeus c. as long as frons; rostrum extending to level of hind coxae. Pronotal width 15 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Fronto-lateral surfaces of pronotum rarely with a bright orange band extending horizontally from adjacent to midline of eye to lateral margin; females with last abdominal segment very narrowly orange at ventro-lateral angles. Tegmen and wing very faintly smoky hyaline, veins pale. Tegmen with a small brownish spot between subcostal vein and costal margin at one-sixth length; a narrow, irregular, transverse band extending from costal to claval margin at one-third length; a brownish band extending from second branch of cubital vein to claval margin slightly basad of midlength; a very faint and ill-defined transverse band over apical forks of radial and medial veins. Wing with a very faint, broken, oblique, smoky brown transverse band at approximately midlength; apical third of length with veins and branches of veins broadly edged smoky brown.

Shaft of aedeagus slender; lateral surfaces subapically each produced into a flap-like process extending basad from apex to midlength, terminating anteriorly in long, curving, lateral process at midlength; dorsal surface with five pairs of short, triangular, lateral spines subapically, and a large rounded process medially at three-fifths length. Paramere slender, apex truncate; dorsal process situated at two-thirds length, strongly produced posteriorly; dorsal surface subapically with a large secondary process bearing numerous short robust spines; internal surface narrowly produced and extended dorsally at one-third length; ventro-lateral surface at one-third length with a large, triangular, hook-like process.

MATERIAL EXAMINED

Holotype O', **Brazil**: Amazonas, P. das Laranjeiras, 6.viii.1981 (*Arias*) (INPA). Paratypes. 8 O', 30 Q, same locality as holotype (INPA; BMNH).

This species is distinguished by the pigmentation of the tegmen and wing, and by the complex structure of the male genitalia.

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Mysidia jamesi sp. n.

(Figs 181, 291, 398)

Male: head $0.53 \text{ mm} \log, 0.61 \text{ mm} \text{ wide}$; pronotum 1.24 mm wide; tegmen $6.12 \text{ mm} \log$; wing $3.50 \text{ mm} \log$. Female unknown.

Length of frons 6 times width at apex, c. 3 times width at base; ocelli small, distinct; clypeus slightly longer than frons; rostrum extending to base of subgenital plate. Pronotal width c. 14 times mid-dorsal length, fronto-lateral carinae absent; tegula weakly carinate.

Head and body unmarked. Tegmen and wing whitish hyaline. Tegmen with a pale brownish transverse band over first fork of cubital vein; a paler, irregular, marking over medial-cubital cross-vein; a weak transverse band immediately distad of midlength; basal one-fifth length irregularly mottled pale smoky brown. Wing with a very faint, brownish, transverse band at midlength, another over radial-medial cross-vein.

Shaft of aedeagus slender in lateral aspect, very broad in dorsal aspect; dorsal surface expanded laterally into a pair of flap-like processes; with a pair of low flap-like processes adjacent to midline, each terminating in an acute spine posteriorly. Paramere robust; dorsal process situated slightly distad of midlength, greatly produced posteriorly; dorsal surface subbasally with numerous small robust spines; ventral surface at midlength with a rounded projection bearing a tuft of long robust spines.

MATERIAL EXAMINED

Holotype O, Brazil: Para, Jubaty, v.1924 (Williams) (BMNH).

Mysidia carosella sp. n.

(Figs 180, 290, 400)

Male: head 0.57 mm long, 0.67 mm wide; pronotum 1.47 mm wide; tegmen 6.80 mm long; wing 3.80 mm long. Female unknown.

Length of frons 8 times width at apex, 2.5 times width at base; ocelli small, not prominent; clypeus slightly longer than frons; rostrum extending to base of subgenital plate. Pronotal width 25 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Genae and fronto-lateral surfaces of pronotum adjacent to eyes tinged orange. Tegmen and wing whitish hyaline; veins, cross-veins and forks of veins pale yellowish brown. Tegmen with radial, medial and claval areas irregularly smoky brown over basal one-quarter length; an irregular brownish band extending from costal to claval margins at level of first fork of cubital vein; a very irregular, somewhat oblique, brownish band extending from medial vein to apex of clavus at level of first fork of medial vein; a broad brownish band extending from costal to posterior margins at level of second fork of medial vein; apical one-third length irregularly mottled brownish around veins and forks of veins. Wing with an indistinct, pale brownish, transverse band extending from costal margin to claval suture at one-quarter length; a darker transverse band extending from medial vein to apex of clavus immediately posterior to first fork of cubital vein; a broad, rather irregular, transverse, brownish band at level of radial-medial cross-vein; apical margin narrowly pale smoky brown.

Shaft of aedeagus slender; apex broadly produced dorsally and anteriorly; dorso-lateral margins each subapically produced into a large, flap-like process extending to just short of midlength; dorsal surface at one-third length with a pair of rounded flap-like processes. Paramere complex, constricted medially; apex broadly rounded, strongly produced dorsally; dorsal process situated at *c*. two-thirds length, strongly produced dorsally and posteriorly; internal ventral surface with a rounded node at two-thirds length, bearing numerous, small, tooth-like spines subbasally.

MATERIAL EXAMINED

Holotype O, Bolivia: 3 miles N. Buena Vista, 26.iii.1978 (O'Brien) (FAMU).

No single external character distinguishes this species, but the male genitalia are distinctive.

Mysidia harmonia sp. n.

(Figs 206, 316, 425)

Male: head 0.50 mm long, 0.75 mm wide; pronotum 1.51 mm wide; tegmen 7.35 mm long; wing 4.25 mm long. Female unknown.

Length of frons c. 6 times width at apex, 2.5 times width at base; ocelli small, distinct; clypeus one-third longer than frons; rostrum extending to base of subgenital plate. Pronotal width 26 times mid-dorsal length, fronto-lateral carinae obsolete; tegula weakly carinate.

Head and body unmarked. Tegmen and wing whitish hyaline. Tegmen with veins and cross-veins broadly edged very pale brownish; basal area irregularly mottled pale brown; an irregular, brownish, transverse band at one-third length; another, fainter, band over medial-cubital cross-vein; a third, very narrow, band over second fork of medial vein. Wing with an irregular, smoky hyaline, transverse band over first fork of cubital vein; another more broken band over medial-cubital cross-vein; a third over radial-medial cross-vein.

Shaft of aedeagus laterally expanded subapically; dorsal surface subapically with a pair of very large, acute, flap-like processes. Paramere broadly rounded apically; dorsal process small, situated at *c*. midlength, dorsally produced, laterally bifurcate apically; with a secondary process subbasally bearing a single rounded projection.

MATERIAL EXAMINED

Holotype O', Colombia: Putumayo, La Hormiga, 6.ix. 1978 (Cooper) (BMNH).

In the absence of distinctive external characters, this species is most readily distinguished by the male genitalia.

Mysidia silvana sp. n.

(Figs 251, 362, 472)

Male: head $0.55 \text{ mm} \log, 0.82 \text{ mm} \text{ wide}$; pronotum 1.80 mm wide; tegmen $9.35 \text{ mm} \log$; wing $5.10 \text{ mm} \log$. Female unknown.

Length of frons c. 6 times width at apex, c. 3 times width at base; ocelli distinct; clypeus one-fifth longer than frons; rostrum extending to base of subgenital plate. Pronotal width 28 times mid-dorsal length, fronto-lateral carinae absent; tegula weakly carinate.

Head unmarked. Disc of mesonotum dark brown. Tegmen and wing whitish hyaline. Tegmen with cross-veins broadly edged pale smoky brown; an irregular, pale brown, transverse band at one-tenth length; another at one-fifth length; a third over first fork of cubital vein; another at two-fifths length; a fifth at midlength; another over second fork of medial vein; a seventh much fainter band at three-quarters length. Wing with a broken, irregular, indistinct, pale brownish, transverse band at midlength; another over first fork of medial vein.

Shaft of aedeagus slender, greatly expanded subapically; dorsal surface subapically with a pair of very large flap-like processes, each terminating in a long spine and bearing at midlength an erect spine. Paramere very robust, apex obtusely rounded; dorsal process situated at two-fifths length, posteriorly produced; dorsal surface at two-thirds length produced into a large, medially directed, flap-like secondary process.

MATERIAL EXAMINED

Holotype Q, Peru: Tingo Maria, 13.vii.1968 (O'Brien) (FAMU).

The dark brown mesonotal disc and the structure of the male genitalia distinguish this species.

Mysidia bella sp. n.

(Figs 229, 340, 449)

Male: head 0.63 mm long; 0.82 mm wide; pronotum 1.36 mm wide; tegmen 6.80 mm long; wing 4.00 mm long. Female unknown.

Length of frons c. 6 times width at apex, slightly less than 2.5 times width at base; ocelli small and obscure; clypeus slightly longer than frons; rostrum extending to base of subgenital plate. Pronotal width c. 15 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Head and body unmarked. Tegmen and wing whitish hyaline, veins pale. Tegmen with an indistinct, irregular, brownish, transverse band subbasally; another more broken band extending from medial vein to claval margin at approximately one-sixth length; another more continuous band extending from costal margin to apex of anal vein at one-quarter length; another irregular band extending from second fork of cubital vein to apex of clavus at three-eighths length; a very indistinct, pale, transverse band extending from costal margin to apex of first branch of cubital vein slightly distad of midlength. Wing with an irregular, smoky brown band extending transversely from medial vein to apex of clavus at one-third length,

and produced narrowly basad over apices of anal veins; another broader band extending from radialmedial cross-vein to posterior margin at three-quarters length, extending narrowly along posterior margin over apices of first and second branches of cubital vein.

Shaft of aedeagus slender in lateral aspect; lateral surfaces subapically each with a large, flap-like process extending over dorsal surface, bearing rounded projection dorsally; ventral surface at two-thirds length with a small, triangular process at midline. Paramere robust; apex obtusely rounded; dorsal process large, situated at midlength, strongly produced dorsally and posteriorly.

MATERIAL EXAMINED

Holotype O, Brazil: Amazonas, P. das Laranjeiras, 30.vii.1981 (Arias) (INPA).

This species is distinguished by the five transverse bands on the tegmen, the two transverse bands on the wing, and by the structure of the male genitalia.

Mysidia decora sp. n.

(Figs 192, 302, 411)

Male: head 0.59 mm long, 0.71 mm wide; pronotum 1.64 mm wide; tegmen 8.25 mm long; wing 4.70 mm long. Female unknown.

Length of frons slightly greater than 6 times width at apex, slightly less than 3 times width at base; ocelli distinct; clypeus slightly shorter than frons; rostrum extending to apex of abdomen. Pronotal width 25 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Fronto-lateral surfaces of pronotum weakly tinged orange. Tegmen and wing whitish hyaline, veins pale yellow, cross-veins and forks of veins broadly edged pale smoky brown. Tegmen with a narrow, smoky brown, transverse band at one-tenth length; another at one-quarter length; another at one-third length; with less distinct and more irregular bands at two-fifths and midlength. Wing with an irregular, indistinct, smoky brown, transverse band at midlength, another over radial-medial cross-vein.

Shaft of aedeagus broadly expanded from midlength; lateral surfaces subapically each with a large flap-like process; dorsal surface subapically with a pair of long slender processes medially. Paramere robust, apex very obtusely rounded; dorsal process situated at midlength, small, little produced posteriorly.

MATERIAL EXAMINED

Holotype O^{*}, Brazil: Mato Grosso, 12 50'S 51 47'W, 6.iv.1968 (Richards) (BMNH).

This species, though closely related to *nitida*, *limpida* and *amarantha*, is readily distinguished by the structure of the male genitalia, especially the paramere, and by the tegminal pigmentation.

Mysidia boliviana sp. n.

(Figs 250, 361, 471)

Male: head 0.67 mm long, 0.88 mm wide; pronotum 1.90 mm wide; tegmen 9.25 mm long; wing 5.20 mm long. Female unknown.

Length of frons c. 5 times width at apex, 2.5 times width at base; ocelli distinct; clypeus as long as frons; rostrum extending to posterior margins of hind coxae. Pronotal width 23 times mid-dorsal length, fronto-lateral surfaces and tegula not carinate.

Genae adjacent to eyes and dorsal to ocelli broadly dark brownish. Tegmen and wing whitish hyaline; veins pale, yellowish. Tegmen with a narrow, faint, pale brown band at approximately one-eighth length; a very broad, dark brown, transverse band over first and second forks of cibutal vein; a very faint, broken, pale brownish transverse band extending from immediately basad of medial-cubital cross-vein to posterior margin; a broad, darker brownish, transverse band extending from costal to posterior margins immediately distad of second fork of medial vein. Wing with an irregular, pale brownish, transverse band immediately distad of first cubital fork; another, similar band extending from radial-medial cross-vein to posterior margin.

Shaft of aedeagus slender, somewhat expanded over apical one-quarter length; lateral surfaces subapically each with a large flap-like process extending over dorsal surface and strongly over-lapping at mid-dorsal line, each produced anteriorly into a long spine, bearing mid-dorsally a small spine. Paramere robust; apex broadly rounded; dorsal process situated slightly distad of midlength, strongly produced posteriorly; dorsal surface at *c*. three-fifths length strongly, conically and dorsally produced.

Holotype O, Bolivia: Buenavista, 400 m (Steinbach) (CM).

The male genitalia of this species closely resemble those of *silvana*, but it is readily distinguished by the prominent dark bands on the tegmina.

Mysidia persephone sp. n.

(Figs 204, 314, 423)

Male: head 0.57 mm long, 0.75 mm wide; pronotum 1.28 mm wide; tegmen 6.38 mm long; wing 3.57 mm long. Female unknown.

Length of frons c. 5 times width at apex, c. 3 times width at base; ocelli very large and prominent; clypeus one-quarter longer than frons; rostrum terminating slightly posterior to hind-coxae. Pronotal width c. 12 times mid-dorsal length; fronto-lateral surfaces and tegula without distinct carinae.

Head and body unmarked; ocelli narrowly edged reddish. Tegmen and wing whitish hyaline, veins pale. Tegmen with a broad, pale brownish, transverse band at one-seventh length; another, similar band extending from costal to claval margins over first fork of cubital vein; a very faint brownish band between first and second forks of medial vein; another similar band extending from radial-medial cross-vein almost to apical fork of radial vein; with an irregular and indistinct, pale brownish spot over apical branches of radial and medial veins. Wing with a faint, pale brownish spot over first branch of cubital vein at midlength; apical one-third length very faintly brownish.

Shaft of aedeagus slender; dorsal surface subapically with a pair of long, spine-like processes; dorsolateral surfaces each with a curving spine-like process. Paramere slender; apex acutely rounded; dorsal process situated immediately distad of midlength, weakly produced dorsally and posteriorly; dorsal surface subbasally with a rounded projection bearing numerous short robust spines.

MATERIAL EXAMINED

Holotype O^{*}, **Brazi**l: Rio Uaupés, Taracua, 15.iii (*Roman*) (NR). Paratype. 1 O^{*}, same data as holotype (BMNH).

The structure of the aedeagus closely resembles that of *intima* but that of the paramere is quite distinct; the species is also distinguished by the prominent ocelli and by the tegminal pigmentation.

Mysidia marshalli sp. n.

(Figs 223, 334, 444)

Male: head 0.69 mm long, 0.48 mm wide; pronotum 1.72 mm wide; tegmen 8.10–8.50 mm long; wing 4.68 mm long. Female unknown.

Length of frons 5 times width at apex, c. twice width at base; ocelli small, distinct; clypeus one-third longer than frons; rostrum extending to base of subgenital plate. Pronotal width c. 20 times mid-dorsal length; fronto-lateral surfaces and tegula without distinct carinae.

Head and body unmarked. Tegmen and wing whitish hyaline, veins pale brown. Tegmen with alternating transverse bands of pale and rather darker smoky brown over basal one-third length, enclosing a small, circular, pale spot between cubital vein and clavus; with an indistinct, smoky brown, transverse band over first fork of medial vein; another darker band over second fork of medial vein; apical two-fifths length very pale smoky brown. Wing with an irregular, smoky brown, transverse band over first fork of cubital vein; another darker at hird over radial-medial cross-vein; apex smoky brown.

Shaft of aedeagus greatly expanded from two-fifths length to apex; lateral surfaces each with a very large flap-like process extending over dorsal surface. Paramere robust, apex broadly rounded; dorsal process situated at midlength, small, produced posteriorly.

MATERIAL EXAMINED

Holotype O⁴, **Bolivia**: Cbb., Pto., San Francisco, 19 miles NW. Villa Tunari, 1.iv.1978 (O'Brien & Marshall) (FAMU).

Paratype. 1 O, same data as holotype (BMNH).

Though the pigmentation of the wing is distinctive, reference should also be made to the male genitalia in determination of this species.

Mysidia neonebulosa Muir

(Figs 230, 341, 450)

M[ysidia] neonebulosa Muir, 1918: 424. Holotype O, GUYANA (OSU) [examined].

Male: head 0.56 mm long, 0.80 mm wide; pronotum 1.50 mm wide; tegmen 6.43–8.50 mm long; wing 4.00 mm long. Female: tegmen 7.70 mm long.

Length of frons 7 times width at apex, c. 2-5 times width at base; ocelli small, not prominent; clypeus as long as frons; rostrum extending to base of subgenital plate. Pronotal width 18 times mid-dorsal length; fronto-lateral surfaces not carinate; tegula with weak carinae.

Fronto-lateral surfaces of pronotum each with a broad orange band extending horizontally from adjacent to midline of eye to lateral margin. Tegmen and wing whitish hyaline. Tegmen with a faint, irregular, pale brownish, transverse band at one-eighth length, another at level of first fork of cubital vein, another at level of medial-cubital cross-vein, a fourth, very faint band immediately distad of midlength. Wing with an indistinct, very pale brownish, transverse band at midlength, another at three-quarters length.

Shaft of aedeagus somewhat expanded distad of midlength; dorsal surface subapically with a pair of broad, flap-like processes; ventro-lateral surfaces each with a short, rounded flap-like process subapically. Paramere broad, apex obtusely rounded; dorsal process situated immediately distad of midlength, apex strongly produced posteriorly.

MATERIAL EXAMINED

Holotype \mathcal{O} , Guyana: Bartica, 14.vii.1901 (*Parish*) (OSU). Guyana: 1 \mathcal{O} , 2 \mathcal{Q} , Kartabo (BMNH). Brazil: 4 \mathcal{O} , Para, Jabaty (BMNH).

The holotype has one tegmen and both wings missing. A small delicate species; the markings of the tegmen and wing are often very faint; the structure of the male genitalia is, however, quite distinctive.

Mysidia amarantha sp. n.

(Figs 199, 309, 418)

Male: head 0.59 mm long, 0.80 mm wide; pronotum 2.00 mm wide; tegmen 8.50–9.70 mm long; wing 5.00 mm long. Female: tegmen 9.30 mm long.

Length of frons c. 5.5 times width at apex, c. 2.5 times width at base; ocelli small, distinct; clypeus one-quarter longer than frons; rostrum extending to midlength of abdomen. Pronotal width 20 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Head and body unmarked. Tegmen and wing whitish hyaline. Tegmen with a pale brownish transverse band at one-third length; another, more irregular and less distinct band over medial-cubital cross-vein; a third, more broken band over radial-medial cross-vein; cross-veins very weakly edged smoky brown. Wing with an indistinct transverse band at two-fifths length; another over radial-medial cross-vein, smoky brown.

Shaft of aedeagus greatly laterally expanded over apical two-fifths length; dorsal surface subapically with a pair of large flap-like processes, each with anterior margin adjacent to midline produced into a curving spine. Paramere broad, apex obtusely rounded; dorsal process situated at midlength, not posteriorly produced.

MATERIAL EXAMINED

Holotype J, Ecuador: Napo, Muyana, 5 km SW. of Tena, 27.xi.1978 (Cooper) (BMNH).

Paratypes. French Guiana: 1 o^{*}, Mana River (CM). Brazil: 2 o^{*}, 1 Q, Amazonas, P. das Laranjeiras (INPA; BMNH).

This species is only reliably distinguished by reference to the male genitalia.

Mysidia magica sp. n.

(Figs 249, 360, 470)

Male: head $0.63 \text{ mm} \log_{10} 0.84 \text{ mm}$ wide; pronotum 1.40 mm wide; tegmen $7.60-8.00 \text{ mm} \log_{10}$; wing $4.30 \text{ mm} \log_{10}$. Female: tegmen $8.65-9.60 \text{ mm} \log_{10}$.

Length of frons 7 times width at apex, c. 3 times width at base; ocelli small, distinct; clypeus one-quarter

longer than frons; rostrum extending to base of subgenital plate. Pronotal width 22 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Head and body unmarked. Tegmen and wing whitish hyaline, veins yellowish. Tegmen with a narrow, pale brownish, transverse band over point of fusion of anal veins; another more distinct band extending from costal margin to apex of clavus; a third, fainter and more broken band extending from medial-cubital cross-vein to posterior margin; a fourth very faint band extending from costal to posterior margins at *c*. midlength. Wing occasionally with a very pale, indistinct, irregular, smoky brown, transverse band over first fork of medial vein, over radial-medial cross-vein, and a third over second fork of cubital vein.

Shaft of aedeagus apically expanded; dorsal surface subapically with a pair of conical processes, each terminating in a large spine; lateral surfaces subapically each with a large spine and a large rounded process. Paramere short and broad; dorsal process situated at midlength.

MATERIAL EXAMINED

Holotype O', Surinam: Brokopondo, 29.i.1969 (O'Brien) (FAMU).

Paratypes. Surinam: 1 0, 3 9, data as holotype and 17 km S. of Kraka (FAMU; BMNH).

This species is distinguished by the four transverse bands of the tegmen, the three bands of the wing, and by the structure of the male genitalia.

Mysidia geoffreyi sp. n.

(Figs 274, 385, 495)

Male: head $0.63 \text{ mm} \log_{10} 0.78 \text{ mm}$ wide; pronotum 1.62 mm wide; tegmen $8.80-8.90 \text{ mm} \log_{10}$; wing $5.10 \text{ mm} \log_{10}$ Female: tegmen $9.77 \text{ mm} \log_{10}$.

Length of frons 6 times width at apex, 2.33 times width at base; ocelli small, distinct; clypeus slightly longer than frons; rostrum extending to base of subgenital plate. Pronotal width c. 15 times mid-dorsal length, fronto-lateral carinae absent; tegula weakly carinate.

Fronto-lateral surfaces of pronotum occasionally each with a broad, pale orange, horizontal band extending from adjacent to eye to lateral margin. Tegmen and wing whitish hyaline. Tegmen with an irregular, often very pale, brownish, transverse band slightly basad of one-third length; a fainter, broken, band immediately distad of midlength; irregularly mottled pale brown basally and over first fork of medial vein; cross-veins very narrowly and irregularly edged pale brownish. Wing with irregular and indistinct, pale brown, transverse bands at one-third length and over radial-medial cross-vein.

Shaft of aedeagus greatly laterally expanded; dorsal surface over apical two-fifths length with a pair of broad flap-like lobes, a pair of overlapping apically acute processes at midline. Paramere broad, apically rounded; dorsal process situated at one-third length, greatly produced posteriorly.

MATERIAL EXAMINED

Holotype ♂, **Bolivia**: Pando, Provenir, 9.vii.1979 (*Cooper*) (BMNH). Paratype. **Peru**: 2 ♂, 2 ♀, Callanga (BMNH).

Lacking distinctive external characters, this species is most readily distinguished by the structure of the male genitalia.

Mysidia pseudonebulosa Muir

(Figs 278, 389, 499)

Mysidia pseudonebulosa Muir, 1918: 423. Holotype O, GUYANA (OU) [examined].

Male: head 0.63 mm long, 0.80 mm wide; pronotum 1.76 mm wide; tegmen 8.50 mm long. Female unknown.

Length of frons 7 times width at apex, 3 times width at base; ocelli large, prominent; rostrum extending beyond base of subgenital plate. Pronotal width 21 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Genae at level of eyes broadly tinged orange; fronto-lateral surfaces of pronotum broadly and irregularly orange from level of dorsal margins of eyes to lateral margins. Tegmen whitish hyaline, with a brownish transverse band at immediately basad of second fork of cubital vein, another immediately distad of second fork of medial vein.

Shaft of aedeagus, laterally expanded over apical two-fifths length; lateral surfaces subapically each bearing a large, flap-like process extending over dorsal surface, each bearing a long, curving, spine-like

projection; dorsal surface at three-quarters length with a single process medially. Paramere robust; apex broadly rounded; dorsal process situated at midlength, strongly produced posteriorly; dorsal margin subapically somewhat produced and medially inclined.

MATERIAL EXAMINED

Holotype O, Guyana: Bartica, 9.v. 1901 (Osborn) (OU).

The clypeus is obscured and, due to the fragile and badly damaged condition of the unique specimen available for study, it is considered inadvisable to remount it. The right tegmen is mounted on a card below the specimen with the markings obscured by glue; it would appear, however, that more dark transverse bands may be present than the two noted above. The left tegmen and both wings are missing.

Due to the lack of distinctive external characters, this species may only be positively distinguished by reference to the male genitalia.

Mysidia cinerea Fennah

(Figs 189, 299, 408)

Mysidia cinerea Fennah, 1945: 439. Holotype O', TRINIDAD (USNM) [examined].

Male: head 0.46 mm long, 0.63 mm wide; pronotum 1.95 mm wide; tegmen 6.00 mm long; wing 3.50 mm long.

Length of frons c. 5 times width at apex, 2.5 times width at base; ocelli distinct; clypeus c. as long as frons; rostrum extending slightly beyond hind coxae. Pronotal width 11 times mid-dorsal length, fronto-lateral carinae absent; tegula prominently carinate.

Head and body unmarked. Tegmen and wing clear hyaline; veins and cross-veins dull yellowish, very faintly margined pale smoky brown.

Shaft of aedeagus with lateral surfaces subapically each bearing a large flap-like process extending over dorsal surface; ventral surface with a pair of short triangular processes somewhat basad of two-thirds length. Paramere with apex regularly rounded; dorsal process large, situated slightly basad of midlength, reduced to a large, curving, posteriorly directed hook.

MATERIAL EXAMINED

Holotype O, Trinidad: Northern Range, 12.vi.1942 (Fennah) (USNM).

The paratype noted by Fennah as being in the BMNH is presumed lost. The holotype, probably due to having been previously stored in alcohol, has lost most of its pigmentation, which Fennah described thus:

... eyes red; tegmina hyaline, all veins faintly and broadly overlain with brown, a clear ellipsoidal spot near apical fork of M, with the veins tinged brown at fork, veins otherwise concolorous; wings pale hyaline, veins irregularly pale brown, apical cells clouded near margin, veins concolorous. Insect in life powdered pearly gray.

Due to the extremely shrivelled condition of the type, the above measurements are largely estimated, and the species can only be determined by reference to the male genitalia.

Nomina dubia

Mysidia pallida (Fabricius)

Derbe pallida Fabricius, 1803: 81. LECTOTYPE Q, CENTRAL AMERICA (UZM), here designated [examined].

Mysidia pallida (Fabricius) Westwood, 1840: 83.

Female: head 0.78 mm long, 0.96 mm wide; pronotum 2.31 mm wide; tegmen 9.70 mm long; wing 5.40 mm long. Male unknown.

Length of frons 5 times width at apex, c. twice width at base; ocelli small, distinct; clypeus one-fifth longer than frons; rostrum unknown. Pronotal width 25 times mid-dorsal length, lacking fronto-lateral carinae; tegula prominently carinate.

Fronto-lateral surfaces of pronotum each with a narrow orange band extending horizontally from adjacent to eye to lateral margin; tegula ventral to carina dark brown [?]; disc of mesonotum and dorsal

TAXONOMY OF NEOTROPICAL DERBIDAE IN THE NEW TRIBE MYSIDIINI (HOMOPTERA)

surface of abdomen brownish. Tegmen and wing clear hyaline; veins and cross-veins pale brown, narrowly edged brown. Tegmen with costal area yellowish brown; basal one-fifth length irregularly pale brownish; a pale brownish transverse band at slightly distad of first fork of cubital vein; another adjacent to first fork of medial vein; a third adjacent to second fork of medial vein; a fourth, very faint band extending from costal margin to radial-medial cross-vein; apical fork of radial vein dark brown. Wing with a pale, indistinct, brownish, transverse band immediately distad of first fork of cubital vein; an even fainter band over radial-medial cross-vein.

MATERIAL EXAMINED

Lectotype Q, **Central America**: (*Schmidt*) (UZM). Paralectotype. **Central America**: 1 Q (UZM).

The lectotype appears to be teneral and the pigmentation described above is by no means certain. The paralectotype lacks both tegmina and it may not be conspecific with the lectotype. *M. pallida* is known only from these two females, neither of which is in good condition; '*pallida*' is therefore regarded as a nomen dubium and is omitted from both keys.

Mysidia stigma Germar

Derbe stigma Germar, 1830: 56. Syntypes, URUGUAY [not examined]. Mysidia stigma (Germar) Schaum, 1850: 70.

It has not been possible to examine the type-material of this species, which therefore cannot be redescribed and is omitted from the keys. Germar's description is as follows:

alba, elytris puncto ante apicem venisque transversis nigris. Habitat in Monte Video. Mus. de Winthem. Caput, thorax et abdomen alba. Elytra alba, opaca: puncta ante angulum anticum serieque venarum transversali nigris. Alae albae striga una alterave transversa nigra.

It would appear from the above description that the species is probably correctly placed in *Mysidia*; distinct transverse bands on the tegmina and wings are not a feature of the genus *Derbe*, nor within the other subfamilies of the Neotropical Derbidae. This is the only species recorded from as far south as Uruguay.

Species previously transferred from Mysidia

Heronax elatior (Fowler)

Mysidia elatior Fowler, 1900: 73. Heronax elatior (Fowler) Muir, 1918: 230.

Examination of Fowler's type-material confirms Muir's transfer of this species from the Derbinae.

Neocenchrea spreta (Fowler)

Mysidia spreta Fowler, 1900: 74. Basileocephalus spretus (Fowler) Muir, 1918: 230. Neocenchrea spreta (Fowler) Metcalf, 1938: 331.

Examination of the type-material confirms the transfer of the species from the Derbinae.

PSEUDOMYSIDIA Metcalf

Pseudomysidia Metcalf, 1938: 317. Type-species: Pseudomysidia fuscovaria Metcalf, by monotypy.

Width of head in dorsal aspect slightly less than one-third greater than length. Vertex with lateral margins strongly converging from base to level of anterior margins of eyes, then very gradually converging to junction with frons; extending beyond anterior margins of eyes for up to one-half length; basal margin transverse; lateral carinae distinct, but not foliate; junction with frons broadly and regularly rounded. Frons with lateral margins subparallel from apex to level of midline of eyes, then gradually and regularly diverging to base; very slender, length 12–17 times width at apex, c. 3·0–4·5 times width at base; lateral carinae very prominent subbasally. Genae extending anterior to eyes for from one-third to one-half

horizontal diameter of eye. Antenna with second segment club-shaped, c. twice as long as maximum breadth; apex transverse; flagellum arising apically. Ocelli small, distinct, occasionally prominent. Clypeus slender, length up to one-third greater than that of frons, $3\cdot5-4\cdot5$ times width at base; medial carina distinct over c. apical three-quarters length; lateral carinae distinct and percurrent. Rostrum extending to from base of subgenital plate to slightly beyond apex of abdomen.

Pronotal width 6.5-11.0 times mid-dorsal length; very deeply, broadly and regularly incised basally. Fronto-lateral surfaces usually each with a distinct, rarely obsolete, horizontal carina extending from adjacent to midline of eye to lateral margin. Tegula rarely weakly carinate. Disc of mesonotum c. as long as wide; medial and lateral carinae usually distinct, extending over apical half to four-fifths length, rarely obsolete.

Tegmen length usually 5.50–6.80 mm; those of females being slightly longer than those of males. Medial vein becoming distinct from fused radial and subcostal veins at c. one-eighth length; radial and subcostal veins separating slightly basad of midlength. Radial vein with two branches extending to apical margin. Medial vein with 11 branches extending to apical and posterior margins, linked to radial vein by cross-veins at three-quarters length and subapically; cross-veins between first and third, fourth and fifth, six and seventh, and eighth and ninth branches. Cubital vein with three branches extending to posterior margin; first linked to claval suture and to second, second to third, and third to first branch of medial vein by cross-veins.

Wing c. half as long as tegmen. Subcostal and radial veins fused over basal one-third length; radial vein unbranched, linked to medial vein by a single oblique cross-vein somewhat distad of midlength. Medial vein distinct from base, with three branches extending to apical and posterior margins. Cubital vein with two branches extending to posterior margin, second linked to first medial by a cross-vein.

Head and thorax predominantly pale yellowish brown, often with dorsal surfaces, genae, and lateral surfaces of clypeus tinged reddish; ocelli often bright red; frons with lateral carinae rarely dark brown; fronto-lateral surfaces of pronotum often tinged reddish. Dorsal surface of abdomen, at least in part, bright red. Tegmen and wing whitish or hyaline; veins usually pale, occasionally with cross-veins and forks of veins brownish; veins and cross-veins usually edged smoky brown, these markings frequently very faint, often coalescing to form very irregular transverse bands; posterior and apical margins often broadly smoky brown, prominent markings absent.

Male genitalia with shaft of aedeagus symmetrical, horizontal, slender in lateral aspect, basally cylindrical; dorsal surface subapically with 4–6 pairs of mainly horizontal, anteriorly directed, occasionally strongly forked, serrated or apically bifurcate spine-like processes; ventral surface unarmed. Paramere slender, never very robust; basal apodeme one-quarter to slightly less than half total length; apex usually acutely rounded, narrowly inclined towards midline; dorsal process situated at or basad of midlength, simple, usually not produced posteriorly, very rarely with interlocking processes, usually short, broad and apically truncate, lacking a secondary dorsal process; ventral surface usually with numerous long robust spines subbasally. Anal tube little produced, *c*. as long as broad; apex commonly rounded, deeply notched medially.

Female with posterior margin of subgenital plate frequently strongly produced; apex broadly rounded, transverse, or shallowly concave.

The tegminal venation, the structure of the male genitalia and the apical position of the antennal flagellum tend to indicate that *Pseudomysidia* is the least specialised of the mysidiine genera, and that with *Dysimia, Dysimiella* and *Symidia* it diverged from the more common trend of development within the tribe, as exemplified by *Mysidia*, at a comparatively early stage in the development of the group. The 11 branches of the medial vein of the tegmen distinguish the genus from all others in the Mysidiini.

Although the aedeagal characters show continuity within the genus, two species-groups are proposed, based on the structure of the paramere.

The *fuscovaria*-group. Paramere with dorsal process slender, dorsally produced, bearing rudimentary interlocking processes which are most highly developed in *juliana*. This group also includes *palmeri*, *rubidella*, *debora* and *hindore*.

The *panamensis*-group. Paramere with dorsal process very much reduced, broad, apically truncate, with no suggestion of interlocking processes. This group includes all species not included above.

Distributed from Mexico to Costa Rica, Trinidad, Panama, Brazil, Bolivia, Venezuela and Ecuador.

Key to species of Pseudomysidia (based on external characters)

The external differences between species are often very slight; where possible, reference should be made to the structure of the male genitalia.

1 Tegmen with claval area dark. Venezuela araguana Fennah (p. 81)

| | TAXONOMY OF NEOTROPICAL DERBIDAE IN THE NEW TRIBE MYSIDIINI (HOMOPTERA) | 79 |
|------------|---|---------|
| - | Tegmen with claval area pale | 2 |
| 2 (1) | Tegmen and wing with cross-veins and forks of veins strongly and broadly margined dark | |
| | smoky brown | 12 |
| - | Tegmen with cross-veins and forks of veins weakly margined pale smoky brown; appear- ance predominantly hyaline | 3 |
| 3 (2) | Abdomen with dorsal surface predominantly bright red | 4 |
| - (-) | Abdomen with dorsal surface brown or yellow, rarely narrowly red basally at midline | 6 |
| 4 (3) | Pronotum with fronto-lateral surfaces distinctly carinate. Panama palmeri sp. n. (| p. 82) |
| - | Pronotum with fronto-lateral carinae weak or absent | 5 |
| 5 (4) | Male tegmen less than 6 mm. Mexico rubidella Ball (in part) (| p. 80) |
| - | Male tegmen greater than 6 mm. Panama juliana sp. n. (| p. 81) |
| 6 (3) | Male tegmen not greater than 5 mm. Panama fuscovaria Metcalf (| p. 80) |
| - 7 (6) | Male tegmen greater than 5 mm Fronto-lateral surfaces of pronotum distinctly carinate | 10 |
| - (0) | Fronto-lateral surfaces of pronotum distinctly carinate | 10 8 |
| 8 (7) | Tegmen with veins and cross-veins pale yellow. Trinidad <i>trinidadensis</i> sp. n. (| |
| - | Tegmen with veins and cross-veins brownish | 9.02) |
| 9 (8) | Junction of frons and vertex usually dark brown. Tegmen with pigmentation around | - |
| | cross-veins and forks of veins coalescing to form two broken, very irregular, transverse | |
| | bands. Costa Rica similis sp. n. (| p. 83) |
| - | Junction of frons and vertex unmarked. Tegmen with four very irregular transverse bands. | |
| 10 (7) | Mexico | p. 80) |
| 10 (7) | Tegmen with cross-veins and forks of veins dark brown. Costa Rica marshalli sp. n. (Tegmen with cross-veins and forks of veins pale | p. 83) |
| 11(10) | Head pale yellowish throughout. Panama hindore sp. n. (| 11 |
| | Head with genae dorsal and ventral to eyes bright scarlet. Brazil | p. 63 |
| 12 (2) | Fronto-lateral surfaces of pronotum tinged reddish | 13 |
| - `´ | | 15 |
| 13(12) | Fronto-lateral surfaces of pronotum weakly carinate | 14 |
| - | Fronto-lateral surfaces of pronotum strongly carinate. Ecuador pallida sp. n. (1) | p. 84) |
| 14(13) | Male tegmen less than 6 mm. Panama panamensis sp. n. (| p. 84) |
| - | Male tegmen greater than 6 mm. Ecuador ecuadoriensis sp. n. (| p. 85) |
| 15(12) | Pronotal width 11 times length. Costa Rica | |
| - 16(15) | Pronotal width not greater than 8 times length. | 16 |
| 10(15) | Pronotal width 8 times length. Tegmen with posterior and apical margins broadly smoky brown. Bolivia <i>lepida</i> sp. n. (1) | 2 86) |
| - | Pronotal width distinctly less than 8 times length. Tegmen with posterior and apical | 9.00) |
| | margins pale. Ecuador | 5. 86) |

Key to species of *Pseudomysidia* (based on male genitalia)

It has not been possible to examine a male of *lepida* which is therefore omitted from this key.

| 1 | Paramere with dorsal process greatly reduced, situated basad of midlength, short, broad, and apically truncate |
|-------|---|
| - | Paramere with dorsal process produced dorsally, situated at midlength, long, slender, apically acute |
| 2 (1) | Aedeagus with four pairs of subapical spines (Fig. 34) palmeri sp. n. (p. 82) |
| - | Aedeagus with five or six pairs of subapical spines |
| 3 (2) | Aedeagus with five pairs of subapical spines (Fig. 35) rubidella Ball (p. 80) |
| - | Aedeagus with six pairs of subapical spines |
| 4 (3) | Paramere with interlocking surfaces |
| - | Paramere without interlocking surfaces |
| 5 (4) | Aedeagus with longest pair of subapical spines curving laterally and apically serrated (Fig. |
| | 36) juliana sp. n. (p. 81) |
| - | Aedeagus with longest pair of subapical spines anteriorly directed and apically acute (Fig. |
| | 37) debora sp. n. (p. 85) |
| 6 (4) | Aedeagus with third pair of subapical spines serrated, lateral spines short (Fig. 38) |
| | similis sp. n. (p. 83) |

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|----------|---|
| _ | Aedeagus with third pair of subapical spines not serrated, lateral spines long (Fig. 39) |
| | hindore sp. n. (p. 83) |
| 7 (1) | Aedeagus with three pairs of subapical spines |
| - | Aedeagus with four or more pairs of subapical spines |
| 8 (7) | Aedeagus with medial pair of subapical spines strongly branched and dorsally serrated |
| | (Fig. 40) panamensis sp. n. (p. 84) |
| - | Aedeagus with medial pair of subapical spines shallowly forked at apex (Fig. 41) |
| o (m) | fuscovaria Metcalf (p. 80) |
| 9 (7) | Aedeagus with four pairs of subapical spines |
| - | Aedeagus with at least five pairs of subapical spines |
| 10 (9) | Aedeagus with third pair of subapical spines apically forked (Fig. 42) pallida sp. n. (p. 84) |
| - | Aedeagus with all spines simple (Fig. 43) araguana Fennah (p. 81) |
| 11 (9) | Aedeagus with five pairs of subapical spines |
| - 12(11) | Acdeagus with six pairs of subapical spines |
| 12(11) | Acdeagus with fifth pair of subapical spines strongly branched (Fig. 44) marshalli sp. n. (p. 83) |
| - | Aedeagus with fifth pair of subapical spines not as above (Fig. 45) |
| 13(11) | Acdeagus with subapical spines anteriorly directed |
| 14(13) | Acteagus with subapical spines anteriorly directed |
| 14(13) | Acdeagus with spines not as above |
| 15(14) | Acdeagus with medial pair of subapical spines very slender, fourth pair longest (Fig. 48) |
| 13(14) | delicata sp. n. (p. 86) |
| _ | Aedeagus with medial pair of subapical spines robust and longest (Fig. 49) |
| | obnubilia sp. n. (p. 86) |
| | |

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Pseudomysidia fuscovaria Metcalf

(Figs 11, 41, 57, 73)

Pseudomysidia fuscovaria Metcalf, 1938: 317. Holotype O, PANAMA (MCZ) [examined].

Male: head 0.44 mm long, 0.48 mm wide; pronotum 0.90 mm wide; tegmen 4.75 mm long; wing 2.58 mm long. Female: tegmen 5.70 mm long.

Length of frons 16 times width at apex, 3.5 times width at base; ocelli distinct; clypeus slightly longer than frons; rostrum extending to base of subgenital plate. Pronotal width 7 times mid-dorsal length; fronto-lateral surfaces and tegula with carinae obsolete or absent.

Genae and fronto-lateral surfaces of pronotum occasionally tinged orange; ocelli crimson; scutellum and dorsal surfaces of abdomen occasionally tinged pale crimson. Tegmen and wing almost hyaline, faintly tinged whitish, veins yellowish brown; cross-veins and forks of veins darker brown, narrowly edged pale smoky brown; without transverse markings.

Shaft of aedeagus slender; dorsal surface subapically with three pairs of spine-like processes, medial pair apically bifid. Paramere slender, apex narrowly rounded; dorsal process situated at midlength, not posteriorly produced.

MATERIAL EXAMINED

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Holotype \bigcirc , **Panama**: Canal Zone, Barro Colorado, 15.vii.1924 (*Banks*) (MCZ). Paratypes. **Panama**: 7 \bigcirc , 12 \bigcirc same data as holotype (MCZ); 1 \bigcirc , 1 \bigcirc (FAMU; BMNH).

This species is readily distinguished by its small size, lack of pigmentation on the tegmen and wing, and by the structure of the male genitalia.

Pseudomysidia rubidella (Ball) comb. n.

(Figs 35, 51, 67)

Mysidia rubidella Ball, 1928: 199. Holotype O, MEXICO (USNM) [examined].

Male: head 0.46 mm long, 0.42 mm wide; pronotum 0.92 mm wide; tegmen 5.60-5.70 mm long; wing 3.00 mm long. Female: tegmen 6.30-6.45 mm long.

Length of frons 11 times width at apex, 4 times width at base; ocelli small, distinct; clypeus slightly longer than frons; rostrum terminating immediately posterior to hind coxae. Pronotal width 9 times mid-dorsal length; fronto-lateral surfaces and tegula weakly carinate.

Head and body often bright scarlet with frons, clypeus, tegula and legs yellowish brown; otherwise yellowish brown throughout. Tegmen and wing whitish hyaline, veins and cross-veins yellowish brown. Tegmen with cross-veins and forks of veins darker brown, broadly and irregularly edged smoky brown, these markings coalescing to form a very broken transverse band at level of second fork of cubital vein, and another at each of first, second and third branches of medial vein. Wing with a faint, oblique, smoky brown transverse band at level of radial-medial cross-vein; apical and posterior margins weakly tinged greyish brown.

Shaft of aedeagus slender; dorsal surface subapically with five pairs of long spine-like processes. Paramere broadly rounded apically; dorsal process situated at midlength, dorsally directed.

MATERIAL EXAMINED

Holotype \bigcirc , Mexico: Verz Cruz, Presido, vi. (*Barrett*) (USNM). Mexico: 3 \bigcirc , 5 \bigcirc (AC; USNM; BMNH). Honduras: 5 \bigcirc (FAMU; BMNH).

The transfer of this species from *Mysidia* is based on the 11 branches of the medial vein of the tegmen and on the structure of the male genitali. It is distinguished by its relatively large size, frequently bright red pigmentation, and by the structure of the male genitalia.

Pseudomysidia juliana sp. n.

(Figs 36, 52, 68)

Male: head $0.52 \text{ mm} \log_{10} 0.54 \text{ mm}$ wide; pronotum 1.22 mm wide; tegmen $6.12-6.46 \text{ mm} \log_{10}$; wing $3.40 \text{ mm} \log_{10}$. Female: tegmen $6.31-6.48 \text{ mm} \log_{10}$.

Length of frons 13 times width at apex, 4.5 times width at base; ocelli very prominent; clypeus slightly longer than frons; rostrum extending beyond base of subgenital plate. Pronotal width 8 times mid-dorsal length, fronto-lateral carinae weak or obsolete; tegula not carinate.

Genae ventral to eyes frequently reddish, ocelli crimson, lateral margins of frons at level of eyes rarely dark brown; fronto-lateral surfaces of pronotum occasionally reddish; dorsal surface of abdomen, excluding genital segment, often deep red. Tegmen and wing whitish hyaline, veins yellow; cross-veins and forks of veins brownish, narrowly and irregularly edged pale smoky brown; posterior margins weakly and indistinctly tinged smoky grey.

Shaft of aedeagus basally slender; dorsal surface subapically with six pairs of spine-like processes, those fourth from midline with apices narrowly serrated. Paramere slender, apex acute; dorsal process situated at midlength, long and slender; ventral surface subbasally with numerous long slender spines.

MATERIAL EXAMINED

Holotype \mathcal{O}^* , **Panama**: Chiriqui, Fortuna, 82°15′W 8°44′N, 19.v.1978 (*O'Brien & Marshall*) (FAMU). Paratypes. **Panama**: 6 \mathcal{O}^* , 3 \mathcal{Q} , data as holotype (FAMU; BMNH).

The relatively complex structure of the paramere closely resembles that of some species of *Mysidia*; the venation of the tegmen, however, and the structure of the aedeagus leave no doubt as to the correct placement of the species in *Pseudomysidia*. It is distinguished by its relatively large size, reddish pigmentation, and by the structure of the male genitalia.

Pseudomysidia araguana Fennah stat. n.

(Figs 43, 59, 75)

Pseudomysidia fuscovaria Metcalf ssp. araguana Fennah, 1952: 123. Holotype Q, VENEZUELA (BMNH) [examined].

Male: head 0.48 mm long, 0.53 mm wide; pronotum 1.05 mm wide; tegmen 5.80 mm long; wing 2.80 mm long. Female: tegmen 6.40 mm long.

Length of frons c. 13 times width at apex, 4 times width at base; ocelli small, distinct; clypeus one-fifth longer than frons; rostrum extending to midlength of abdomen. Pronotal width 8 times mid-dorsal length, fronto-lateral carinae distinct; tegula not carinate.

Genae weakly tinged reddish around crimson ocelli; fronto-lateral surfaces of pronotum adjacent to eyes reddish, disc of mesonotum brownish, abdomen broadly crimson along midline. Tegmen and wing whitish hyaline, veins yellowish. Tegmen with cross-veins and forks of veins narrowly edged smoky brown; claval area broadly blackish brown; with an irregular, dark brown, transverse band extending from second fork of claval vein to posterior margin, and another extending from first fork of cubital vein obliquely across

cubital cross-veins; costal area with six faint, evenly spaced, pale brownish bands extending from medial vein to anterior margin. Wing unmarked.

Shaft of aedeagus slender; dorsal surface subapically with four pairs of spine-like processes, those adjacent to midline longest. Paramere slender, apex acute; dorsal process situated somewhat distad of midlength, broad, apex truncate; ventral surface subbasally with long, robust spines.

MATERIAL EXAMINED

Holotype ♀, Venezuela: Aragua, Rancho Grande, 1949 (*Racenis*) (BMNH). Venezuela: 1 ♂, nr Maracay (AMNH).

Fennah's description is in error in ascribing to this species only 10 branches to the medial vein of the tegmen the left tegmen of the type, though damaged, shows eleven.

This species is unique in having the claval area of the tegmen darkly pigmented.

Pseudomysidia palmeri sp. n.

(Figs 34, 50, 66)

Male: head 0.54 mm long, 0.54 mm wide; pronotum 1.30 mm wide; tegmen 6.17 mm long; wing 3.48 mm long. Female unknown.

Length of frons c. 16 times width at apex, c. 3 times width at base; ocelli prominent; clypeus slightly longer than frons; rostrum terminating at level of genital segment. Pronotal width c. 8 times mid-dorsal length, fronto-lateral carinae distinct; tegula each with two weak carinae.

Genae ventral to eyes orange, ocelli narrowly edged crimson; fronto-lateral surfaces of pronotum ventral to dorsal margins of eyes orange; abdomen dull reddish. Tegmen and wing very weakly tinged whitish, veins yellow; cross-veins and forks of veins brownish, the latter narrowly edged smoky brown. Wing with posterior margin narrowly edged pale smoky grey.

Shaft of aedeagus slender, weakly expanded subapically; dorsal surface subapically with four pairs of spine-like processes; medial pair long, adjacent pair with apices weakly serrated, next pair strongly curving. Paramere with apex obtusely rounded; dorsal process large, situated at midlength, apex decurved and bearing numerous small spines; dorsal surface subbasally with a row of long, slender spines.

MATERIAL EXAMINED

Holotype O, Panama: Chir. Las Lagunas, 2.5 miles W. El Volcan, 4400 ft (O'Brien & Marshall) (FAMU).

This species is distinguished by the reddish pigmentation of the abdomen, the carination of the fronto-lateral surfaces of the pronotum, and by the structure of the male genitalia.

Pseudomysidia trinidadensis sp. n.

(Figs 46, 62, 78)

Male: head $0.46 \text{ mm} \log_{10} 0.57 \text{ mm}$ wide; pronotum 1.07 mm wide; tegmen $5.70 \text{ mm} \log_{10}$; wing $2.77 \text{ mm} \log_{10}$ Female unknown.

Length of frons c. 12 times width at apex, 3.5 times width at base; ocelli small; clypeus c. one-third longer than frons; rostrum extending to apex of abdomen. Pronotal width 6.5 times mid-dorsal length; fronto-lateral surfaces and tegula not carinate.

Genae around ocelli and dorsad of eyes pale crimson; fronto-lateral surfaces of pronotum and disc of mesonotum pale orange. Tegmen and wing whitish hyaline, veins and cross-veins pale yellow; cross-veins and forks of veins broadly and irregularly edged very pale brownish. Tegmen with a broad, irregular, faint, brownish transverse band extending from cubital vein to posterior margin at one-quarter length.

Shaft of aedeagus short, broad; dorsal surface subapically with four pairs of spine-like processes, medial pair each with a curving spine at midlength. Paramere slender, apex acute; dorsal process broad, truncate, situated at one-third length.

MATERIAL EXAMINED

Holotype O, Trinidad: Mt Harris (Withycombe) (BMNH).

This species is distinguished by the paleness of the markings of the tegmen and wing, and by the structure of the aedeagus.

Pseudomysidia similis sp. n.

(Figs 38, 54, 70)

Male: head $0.46 \text{ mm} \log_{10} 0.48 \text{ mm}$ wide; pronotum 0.95 mm wide; tegmen $5.40-5.60 \text{ mm} \log_{10}$; wing $2.60 \text{ mm} \log_{10}$. Female: tegmen $6.00-6.70 \text{ mm} \log_{10}$.

Length of frons 14 times width at apex, 4 times width at base; ocelli small, distinct; clypeus slightly longer than frons; rostrum extending to base of subgenital segment. Pronotal width 8 times mid-dorsal length; fronto-lateral surfaces and tegula with carinae obsolete or absent.

Junction of vertex and frons often tinged brownish, ocelli yellowish brown or red. Tegmen and wing whitish hyaline, veins yellowish, cross-veins broadly and irregularly edged smoky brown. Tegmen with pigmentation around cross-veins coalescing to form an irregular transverse band at one-quarter length, and at approximately two-fifths length. Wing with veins narrowly edged smoky brown apically.

Shaft of aedeagus gradually broadening towards apex; dorsal surface subapically with six pairs of spine-like processes, third pair from lateral margins finely serrated. Paramere slender basally; apex broadly rounded; dorsal process situated at midlength, strongly produced posteriorly.

MATERIAL EXAMINED

Holotype o^{*}, **Panama**: Barro Colorado, C.Z., 5.vii.1971 (*Wolda*) (FAMU). Paratype. 1 Q, same data as holotype (BMNH).

This species is distinguished by the pigmentation of the head and tegmen, and by the structure of the male genitalia.

Pseudomysidia marshalli sp. n.

(Figs 44, 60, 76)

Male: head $0.46 \text{ mm} \log_{10} 0.55 \text{ mm}$ wide; pronotum 1.07 mm wide; tegmen $5.86 - 6.03 \text{ mm} \log_{10}$; wing $3.00 \text{ mm} \log_{10}$. Female: tegmen $6.70 - 7.00 \text{ mm} \log_{10}$.

Length of frons 13 times width at apex, 3.5 times width at base; ocelli small, occasionally obscure; clypeus one-fifth longer than frons; rostrum terminating slightly basad of subgenital segment. Pronotal width *c*. 7 times mid-dorsal length, fronto-lateral carinae distinct; tegula not carinate.

Genae rarely tinged crimson ventral to eyes; ocelli commonly bright red. Tegmen and wing whitish hyaline, posterior margins broadly hyaline, veins pale; cross-veins and forks of veins darker, broadly edged smoky brown. Tegmen with markings around forks of veins coalescing to form very irregular transverse bands at level of second fork of cubital vein, and at level of each of first, second and third forks of medial vein, the latter two not extending to posterior margin. Wing with a very irregular, pale smoky transverse band at level of radial-medial cross-vein.

Shaft of aedeagus slender; dorsal surface subapically with four pairs of spine-like processes, medial pair trifurcate. Paramere slender, apex acute; dorsal process situated at one-third length, truncate, weakly produced anteriorly; ventral surface over basal half length with long robust spines.

MATERIAL EXAMINED

Holotype o^{*}, **Costa Rica**: Turrialba, 21.vi.1974 (*O'Brien & Marshall*) (FAMU). Paratypes. **Costa Rica**: 1 o^{*}, 12 Q (FAMU; BMNH).

This species is most readily distinguished by the structure of the aedeagus.

Pseudomysidia hindore sp. n.

(Figs 39, 55, 71)

Male: head $0.38 \text{ mm} \log_{10} 0.42 \text{ mm}$ wide; pronotum 1.05 mm wide; tegmen $5.10-5.70 \text{ mm} \log_{10}$; wing $2.80 \text{ mm} \log_{10}$ Female unknown.

Length of frons 12 times width at apex, c. 3 times width at base; ocelli obscure; clypeus c. as long as frons; rostrum extending to apex of abdomen. Pronotal width 8-5 times mid-dorsal length, fronto-lateral carinae distinct; tegula not carinate.

Head and body unmarked. Tegmen and wing whitish hyaline, veins and cross-veins pale yellowish brown; cross-veins irregularly edged pale smoky brown. Tegmen with a weak, irregular, smoky brown, transverse band at one-third length.

Shaft of aedeagus broadly expanded over apical one-half length; dorsal surface subapically with six pairs

of spine-like processes, medial pair apically serrated, lateral pair inclined ventrally. Paramere slender, apex acutely rounded; dorsal process situated at midlength, large, posteriorly produced.

MATERIAL EXAMINED

Holotype O^{*}, **Panama**: Turdi River, San Blas, i.1979 (*Operation Drake Expedition*) (BMNH). Paratype. **Panama**: 1 O^{*}, C.Z., 7 km SW. Gatun Lock (FAMU).

Though lacking distinctive pigmentation, this species may be readily distinguished by the structure of the aedeagus.

Pseudomysidia vestis sp. n.

(Figs 45, 61, 77)

Male: head 0.42 mm long, 0.57 mm wide; pronotum 1.10 mm wide; tegmen 6.00 mm long; wing 2.50 mm long. Female unknown.

Length of frons c. 12 times width at apex, 3.5 times width at base; ocelli small, distinct; clypeus one-quarter longer than frons; rostrum extending to base of subgenital plate. Pronotal width c. 9 times mid-dorsal length, fronto-lateral carinae distinct; tegula with carinae obscure.

Head with genae dorsal and ventral to eyes, and lateral margins of clypeus bright scarlet; ocelli scarlet. Tegmen and wing clear hyaline, veins yellowish. Tegmen with an indistinct, irregular, oblique, smoky brown, transverse band at level of each of first, second and third forks of medial vein. Wing with a broad, faint, smoky brown, transverse band at one-third and two-thirds length; apex weakly smoky hyaline.

Shaft of aedeagus robust; with six pairs of spine-like processes, of which the next to lateral pair are longest. Paramere slender; apex narrowly rounded; dorsal process situated at approximately one-third length, apically truncate.

MATERIAL EXAMINED

Holotype O, Brazil: Amazon, Rio Purus, i.1915 (Roman) (NR).

Paratype. Brazil: 1 0[°], Amazon, S. Gabriel (BMNH).

This species is distinguished by the pigmentation of the head and tegmen, and by the six pairs of processes of the aedeagus.

Pseudomysidia pallida sp. n.

(Figs 14, 30, 42, 58, 74)

Male: head 0.52 mm long, 0.50 mm wide; pronotum 1.06 mm wide; tegmen 5.90–6.12 mm long; wing 2.90 mm long. Female: tegmen 6.20–6.80 mm long.

Length of froms 15 times width at apex, 3 times width at base; ocelli small, distinct; clypeus slightly longer than froms; rostrum terminating c. level with apex of abdomen. Pronotal width 7.5 times mid-dorsal length, fronto-lateral carinae distinct; tegula not carinate.

Genae tinged reddish dorsal to eyes and around ocelli and bases of antennae, lateral surfaces of clypeus reddish brown; fronto-lateral surfaces of pronotum reddish, each with a dark reddish brown spot at level of and adjacent to eye. Tegmen and wing whitish hyaline, veins pale brown. Tegmen with veins and cross-veins broadly and irregularly edged brownish. Wing with radial-medial cross-vein and adjacent fork of medial vein broadly edged smoky hyaline.

Shaft of aedeagus slender, broadening subapically; dorsal surface subapically with four pairs of robust spine-like processes of which the longest pair are apically bifid. Paramere slender, apex acutely rounded; dorsal process situated at one-quarter length, large, truncate, weakly inclined anteriorly.

MATERIAL EXAMINED

Holotype o^{*}, Ecuador: Mera, 1–2.ii.1923 (*Williams*) (BMNH). Paratypes. 13 o^{*}, 11 Q, same data as holotype (BMNH; FAMU).

This species is distinguished by the pigmentation of the head and pronotum, and by the structure of the aedeagus.

Pseudomysidia panamensis sp. n.

(Figs 40, 56, 72)

Male: head $0.40 \text{ mm} \log_{10} 0.48 \text{ mm}$ wide; pronotum 1.05 mm wide; tegmen $5.00-5.52 \text{ mm} \log_{10}$; wing $2.40 \text{ mm} \log_{10}$ Female: tegmen $6.10 \text{ mm} \log_{10}$.

TAXONOMY OF NEOTROPICAL DERBIDAE IN THE NEW TRIBE MYSIDIINI (HOMOPTERA) 85

Length of frons 13 times width at apex, 3.5 times width at base; ocelli small, distinct; clypeus as long as frons; rostrum extending to subgenital plate. Pronotal width 8.5 times mid-dorsal length, fronto-lateral carinae weak; tegula not carinate.

Genae crimson dorsad of eyes and from level of anterior margins of eyes to ventral margins, ocelli red. Fronto-lateral surfaces of pronotum crimson at and ventral to level of eyes; lateral surfaces of mesonotum and metanotum weakly crimson; disc of mesonotum pale brownish; dorsal surface of abdomen dark brown, tinged red. Tegmen and wing whitish hyaline, veins and cross-veins pale brown; cross-veins and branches of veins very broadly edged dark smoky brown. Tegmen with brownish markings coalescing to form a very irregular transverse band at level of first fork of cubital vein, with less distinct bands at level of each of first, second and third forks of medial vein. Wing with an irregular, transverse, smoky brown band at level of radial-medial cross-vein, a weaker band near costal margin at level of first fork of cubital vein; apex faintly tinged smoky brown.

Shaft of aedeagus slender throughout; dorsal surface subapically with three pairs of spine-like processes; medial pair very long and robust, bifurcate from midlength. Paramere basally slender, apex acutely rounded; dorsal process situated slightly basad of midlength, truncate.

MATERIAL EXAMINED

Holotype O', **Panama**: Cerro Campana, 29.vi.1974 (*O'Brien & Marshall*) (FAMU). Paratypes. 5 O', 1 Q, same data as holotype (FAMU; BMNH).

This species is most readily distinguished by the structure of the aedeagus.

Pseudomysidia ecuadorensis sp. n.

Male: head 0.46 mm long, 0.57 mm wide; pronotum 1.25 mm wide; tegmen 6.40–6.80 mm long; wing 3.33 mm long. Female unknown.

Length of frons 15 times width at apex; 3.33 times width at base; ocelli very small, distinct; clypeus c. as long as frons; rostrum extending to midlength of genital segment. Pronotal width 7.5 times mid-dorsal length, fronto-lateral carinae weak; tegula not carinate.

Genae pale crimson dorsad to eyes and around ocelli, ocelli crimson; fronto-lateral surfaces of pronotum reddish from level of eyes to ventral margins. Tegmen and wing whitish hyaline, veins and cross-veins yellowish brown; cross-veins and forks of veins irregularly and broadly edged smoky brown. Tegmen with markings coalescing to produce a mottled appearance, forming an oblique, irregular, transverse band at level of second fork of cubital vein and at each of first, second and third forks of medial vein; posterior and apical margins broadly pale smoky brown. Wing with a faint, oblique, smoky brown transverse band at level of radial-medial cross-vein and at one-third length; apex broadly pale smoky brown.

Shaft of aedeagus slender, gradually expanded to apex; dorsal surface subapically with five pairs of spine-like processes. Paramere slender; apex narrowly rounded; dorsal process situated at one-quarter length, truncate, apex antero-laterally directed.

MATERIAL EXAMINED

Holotype O' Ecuador: Tena, 14.ii.1923 (*Williams*) (BMNH). Paratypes. Ecuador: 2 O', Tena (BMNH).

This species is distinguished by the dark mottled appearance of the tegmen, and by the structure of the aedeagus.

Pseudomysidia debora sp. n.

(Figs 37, 53, 69)

Male: head 0.40 mm long, 0.55 mm wide; pronotum 1.13 mm wide; tegmen 6.30 mm long; wing 3.10 mm long. Female: tegmen 7.00–7.30 mm long.

Length of frons 12 times width at apex, 4 times width at base; ocelli small, distinct; clypeus one-quarter longer than frons; rostrum extending to base of subgenital plate. Pronotal width 11 times mid-dorsal length, fronto-lateral carinae very weak; tegula not carinate.

Ocelli narrowly edged crimson. Tegmen and wing whitish hyaline, veins pale yellow; cross-veins and forks of veins brownish, broadly edged smoky brown. Tegmen with a brownish spot on radial cell at level of first fork of medial vein, apex of clavus irregularly pale smoky brown. Wing with posterior and apical margins broadly and irregularly very pale smoky brown.

Shaft of aedeagus slender; dorsal surface subapically with six pairs of spine-like processes, medial pair longest with external surfaces basally serrated. Paramere basally slender, apex acutely rounded; dorsal process situated at approximately midlength, produced dorsally; ventral surface basally with numerous very long, robust, spines.

MATERIAL EXAMINED Holotype \mathcal{O} , **Costa Rica**: Turrialba, 28.v.1957 (*Cartwright*) (USNM). Paratypes. 4 \mathcal{Q} , same data as holotype (USNM; BMNH).

This species is most readily distinguished by the structure of the male genitalia.

Pseudomysidia lepida sp. n.

Female: head 0.53 mm long, 0.59 mm wide; pronotum 1.32 mm wide; tegmen 6.63–6.80 mm long; wing 3.40 mm long. Male unknown.

Length of frons 16 times width at apex, c. 4 times width at base; ocelli small, prominent; clypeus slightly longer than frons; rostrum extending to base of subgenital plate. Pronotal width 8 times mid-dorsal length, fronto-lateral carinae distinct; tegula not carinate.

Genae dorsad and ventral to eyes orange; ocelli crimson. Tegmen and wing whitish hyaline, veins irregularly alternating yellow and dark brown; cross-veins dark brown, these and forks of veins broadly edged dark brownish grey. Tegmen with markings coalescing to form irregular, broad, transverse bands at one-seventh length, at level of first fork of cubital vein, at level of first, second and third forks of medial vein, and at somewhat basad of apical fork of medial vein. Wing with posterior and apical margins broadly dark greyish brown; a broad, irregular, transverse band at three-eighths length and another, oblique band at level of medial-radial cross-vein.

MATERIAL EXAMINED

Holotype Q, **Bolivia**: Beni, Rio Beni, Rurrenábaqué, 270 m, 21.vii.1979 (Cooper) (BMNH). Paratypes. 1 Q, same data as holotype (BMNH).

This species is readily distinguished by the very striking markings of the tegmen and wing.

Pseudomysidia obnubilia sp. n.

(Figs 49, 65, 81)

Male: head $0.52 \text{ mm} \log_{10} 0.60 \text{ mm}$ wide; pronotum 1.24 mm wide; tegmen $5.70-6.40 \text{ mm} \log_{10}$; wing $2.84 \text{ mm} \log_{10}$. Female: tegmen $6.12-6.88 \text{ mm} \log_{10}$.

Length of frons 14 times width at apex, 3.33 times width at base; ocelli small, prominent; clypeus slightly longer than frons; rostrum extending to apex of abdomen. Pronotal width 6.5 times mid-dorsal length, fronto-lateral carinae distinct; tegula not carinate.

Genae dorsad and ventrad of eyes orange, ocelli crimson; abdomen occasionally red on mid-dorsal line. Tegmen and wing whitish hyaline, veins yellow, cross-veins dark brown. Tegmen with veins and cross-veins broadly and irregularly edged smoky brown, these markings coalescing to form very irregular transverse bands at one-sixth length, at level of first fork of cubital vein, at each of first and second branches of medial vein and at two-fifths length. Wing with posterior and apical margins broadly smoky brown; a broad, irregular, smoky brown, transverse band at two-thirds length.

Shaft of aedeagus slender, with five pairs of long, spine-like processes. Paramere slender, apex acutely rounded; dorsal process situated at one-third length, truncate.

MATERIAL EXAMINED

Holotype \bigcirc , Ecuador: 18 km S. Tena, 28.iv.1978 (*O'Brien & Marshall*) (FAMU). Paratypes. 3 \bigcirc , 4 \bigcirc , same data as holotype (FAMU; BMNH).

Externally very similar to *delicata*, this species is readily distinguished by the male genitalia.

Pseudomysidia delicata sp. n.

(Figs 48, 64, 80)

Male: head $0.52 \text{ mm} \log_{10} 0.55 \text{ mm}$ wide; pronotum 1.10 mm wide; tegmen $5.60-6.40 \text{ mm} \log_{10}$; wing $2.80 \text{ mm} \log_{10}$ Female: tegmen $5.85-6.40 \text{ mm} \log_{10}$.

Length of frons 12 times width at apex, 2.75 times width at base; ocelli small, distinct; clypeus

one-quarter longer than frons; rostrum extending to base of genital segment. Pronotal width c. 7 times mid-dorsal length, fronto-lateral carinae distinct; tegula not carinate.

Genae crimson dorsal to eyes and from level of anterior margins of eyes to ventral margins; clypeus with lateral margins often pale crimson or brown; ocelli red. Tegmen and wing whitish hyaline, veins pale; cross-veins and bases of branches of veins dark brown, irregularly broadly edged smoky brown; posterior and apical margins broadly pale brownish. Tegmen with dark markings coalescing to form irregular transverse bands at each of first, second and third branches of medial vein. Wing with an irregular, oblique, transverse, smoky brown band at level of medial-cubital cross-vein and at one-third length; apex broadly smoky brown.

Shaft of aedeagus slender, slightly expanded subapically; dorsal surface subapically with five pairs of robust, spine-like processes. Paramere basally slender, apex obtusely rounded; dorsal process situated at one-third length, truncate.

MATERIAL EXAMINED

Holotype \mathcal{O} , **Ecuador**: Tena, 4.iii.1923 (*Williams*) (BMNH). Paratypes. 10 \mathcal{O} , 21 \mathcal{Q} , same locality as holotype (BMNH).

Though externally similar to *obnubilia*, this species is readily distinguished by the structure of the aedeagus.

DYSIMIA Muir

Dysimia Muir, 1924: 462. Type-species: Dysimia maculata Muir, by monotypy.

Head in dorsal aspect one-quarter to two-thirds wider than long. Lateral margins of vertex strongly converging from base to level of anterior margins of eyes, then subparallel to apex, carinae very prominent, extending beyond anterior margins of eyes for one-quarter to one-third length; basal margin very deeply incised; junction with frons broadly rounded. Frons 6-9 times as long as wide at apex, 1.5-2.0 times width at base; lateral margins strongly and regularly diverging from apex to base. Genae extending anterior to eyes for one-third to two-thirds horizontal diameter of eye. Antenna with second segment club-shaped, twice as long as broad; apex transverse; flagellum arising medially. Ocelli small, usually distinct; occasionally obscure or obsolete. Clypeus short, broad; length from three-quarters of to equal that of frons, from *c*. equal to up to one-half greater than width at base; medial carina obsolete or absent; lateral carinae usually obsolete or absent, occasionally weak and extending over basal *c*. one-third length. Rostrum usually terminating at level of posterior surfaces of hind coxae, occasionally slightly shorter.

Pronotal width 8-12 times mid-dorsal length; fronto-lateral surfaces each with a single, distinct, occasionally prominent carina extending horizontally from adjacent to eye to lateral margin. Tegula rarely carinate. Disc of mesonotum *c*. as long as wide; medial carina percurrent, often weak or obsolete, rarely prominent; lateral carinae commonly obsolete or absent, rarely distinct.

Tegmen commonly 3·20–4·40 mm long, rarely more than 6·00 mm long. Medial vein separating from fused subcostal and radial veins at *c*. one-quarter length; subcostal and radial veins separating at somewhat basad of midlength. Radial vein with two branches extending to apical margin. Medial vein with seven branches extending to apical and posterior margins; with cross-veins between first and second and second and third branches. Cubital vein with three branches extending to posterior margin; anterior branch linked by a cross-vein to first medial vein at *c*. midlength (Fig. 9.)

Length of wing greater than one-half that of tegmen. Subcostal and radial veins fused over rather more than basal one-half length. Radial vein unbranched. Medial vein distinct from base, unbranched, linked to radial vein by a cross-vein at c. two-thirds length. Cubital vein with three branches extending to posterior margin, linked to medial vein by a cross-vein at slightly distad of midlength.

Head and body pale, yellowish or brownish. Genae frequently each with a brown band extending horizontally from level of dorsal margin of eye to anterior margin, a similar band at level of ventral margin of eye, rarely unmarked; area around ocelli occasionally tinged brownish. Frons and clypeus rarely with dark markings. Fronto-lateral surfaces of pronotum usually each with a broad brown band extending horizontally from adjacent to eye to lateral margin. Tegmen and wing whitish hyaline; veins pale yellow; cross-veins and forks of veins brownish, often broadly edged smoky brown; apical and posterior marginal veins often crimson, or flecked with red. Tegmen with a large, often prominent, black or brownish, roughly circular spot at one-fifth to one-third length over first branch of cubital vein; often with smaller but equally distinct spots between cubital vein and clavus, adjacent to point of separation of subcostal and radial veins and around apical fork of medial vein. Wing often with a large, prominent, circular, dark brown spot between cubital vein and clavus at c. one-third length; where marking is absent, often with a pale brown transverse band at one-third length.

Male genitalia with shaft of aedeagus horizontal, slender, cylindrical, usually symmetrical; dorsal surface subapically with a pair of large, anteriorly directed, flap-like processes, often bearing from one to three pairs of large, curving, anteriorly or antero-laterally directed spines; ventral surface unarmed. Paramere commonly slender, rarely very robust; apex frequently acutely rounded and directed towards midline; basal apodeme not more than one-third total length; dorsal process situated at or distad to midlength, usually well developed with apex strongly produced posteriorly; interlocking surface usually well developed, situated basally or at midlength, rarely reduced or absent; dorsal surface unarmed. Anal tube with posterior margin rounded, more or less strongly produced, often deeply notched at midline.

Female with posterior margin of subgenital plate more or less strongly produced medially, broadly and regularly convex, rarely truncate apically.

The genus is distinguished by the seven branches of the medial vein of the tegmen, the three branches of the cubital vein of the wing and the apical position of the antennal flagellum. This last character and the proportions of the frons and clypeus show a closer affinity to *Pseudomysidia* than to *Mysidia*, though it is apparently considerably more specialised than the former.

The male genitalia show three possible diverging lines of development within the genus, which allow the postulation of the following species groups.

The *maculata*-group. Species where the shaft of the aedeagus is lacking large spines, with a corresponding increase in the size and armature of the paramere. The group includes *distincta*, *fennahi*, *pseudomaculata* and *telfordi*, and is probably the most highly specialized of the three.

The astarte-group. Species where the shaft of the aedeagus bears strong, heavily chitinized, spine-like processes, and the paramere shows a lesser degree of development. This group includes morrisi, muiri, obrieni, maculipennis and jamaicensis.

The *numa*-group. This monotypic group shows a separate line of development from the above. The aedeagus is heavily armed with three pairs of long, acute, spine-like processes, and the dorsal process of the paramere is greatly reduced and can have little grasping function.

Due to the absence of males, fuscoclypeata and putilla are omitted from the above groups.

The genus is distributed from U.S.A. (Florida) through Central America to Ecuador and Venezuela.

Key to species of *Dysimia* (based on external characters)

D. putilla is omitted from this key due to the fragmentary condition of the unique holotype. In some instances the differences between species are slight and, where possible, reference should be made to the structure of the male genitalia.

| 1 | Tegmen exceeding 6 mm. Jamaica jamaicensis (Distant) (p. 91) |
|------|--|
| - | Tegmen less than 5 mm |
| 2(1) | Wing with a prominent, dark brown, spot adjacent to cubital vein |
| _ | Wing lacking a distinct spot adjacent to cubital vein |
| 3(2) | Genae with dark brown markings adjacent to eye |
| _ | Genae unmarked, pale brownish throughout. Florida pseudomaculata sp. n. (p. 91) |
| 4(3) | Tegmen with cross-veins and apical veins dark brown. Costa Rica obrieni sp. n. (p. 92) |
| - | Tegmen with cross-veins and apical veins pale |
| 5(4) | Male tegmen in excess of 4.00 mm; female with tegmen in excess of 4.50 mm. Tegmen with |
| | posterior margin narrowly scarlet. Ecuador morrisi sp. n. (p. 93) |
| - | Neither sex with tegmen exceeding 4.00 mm. Tegmen with posterior margin pale. Jamaica |
| | <i>muiri</i> sp. n. (p. 92) |
| 6(2) | Clypeus narrowly pale basally, thence dark brown to junction with paraclypeus. |
| | Venezuela fuscoclypeata Fennah (p. 90) |
| _ | Clypeus pale throughout |
| 7(6) | Genae each with one or two dark brown bands extending horizontally from adjacent to eye |
| | to anterior margin. Pronotum dorsad of eyes unmarked |
| - | Genae unmarked. Pronotum dorsad of base of head with two very pale fuscous, parallel, |
| | transverse bands. Cayman Islands numa Fennah (p. 90) |
| 8(7) | Abdomen with a large, dark brown, spot on either side of midline on dorsal surface. Puerto |
| | Rico distincta sp. n. (p. 93), fennahi sp. n. (p. 94), telfordi sp. n. (p. 94) |
| - | Abdomen with dorsal surface unmarked |

| | TAXONOMY OF NEOTROPICAL DERBIDAE IN THE NEW TRIBE MYSIDIINI (HOMOPTERA) 89 |
|-------------------|--|
| - | Disc of mesonotum ventrolaterally marked brownish. Venezuela astarte sp. n. (p. 95) Disc of mesonotum unicolorous yellowish throughout |
| 10(9) | Fronto-lateral surfaces of pronotum ventral to level of dorsal margins of eye dark brown. Ecuador |
| | Tronto internistinaces or pronotani pare brown infoughout. I derto riteo - macunata with (p. 6) |
| Key to | species of <i>Dysimia</i> (based on male genitalia) |
| It has r | not been possible to examine males of <i>fuscoclypeata</i> and <i>putilla</i> , which are omitted from this key. |
| 1 | Paramere with dorsal process bearing a large hook-like spine on dorsal surface (Fig. 118) distincta sp. n. (p. 93) |
| $\frac{-}{2}$ (1) | Paramere with dorsal process unarmed on dorsal surface |
| - | (Fig. 95). Paramere with dorsal process reduced (Fig. 119) numa Fennah (p. 90) Shaft of aedeagus with not more than two pairs of spine-like processes. Paramere with |
| 3 (2) | dorsal process well developed 2 Shaft of aedeagus devoid of large spine-like processes 2 |
| - | Shaft of aedeagus bearing one or two pairs of large, anteriorly directed, spine-like processes subapically |
| 4 (3) | Shaft of aedeagus with dorsal surface with a pair of anteriorly directed, flap-like, processes subapically, each bearing a very small, antero-laterally directed spine (Fig. 96) |
| _ | Shaft of aedeagus with flap-like processes unarmed |
| 5 (4) | Paramere slender, apex acute, dorsal process situated at mid-length (Fig. 121) |
| 6 (5) | Paramere with apex of dorsal process horizontally directed; inter-locking surfaces poorly developed (Fig. 121) pseudomaculata sp. n. (p. 91) |
| - | Paramere with apex of dorsal process inclined ventrally; interlocking surfaces well developed (Fig. 122) muiri sp. n. (p. 92) |
| 7 (5) | Paramere very robust; apex strongly curved towards midline; dorsal process very long and slender; interlocking surfaces situated basally (Fig. 123) <i>fennahi</i> sp. n. (p. 94) |
| - | Paramere relatively small; apex rounded, not curved towards midline; dorsal process robust; interlocking surfaces situated at mid-length (Fig. 124) <i>telfordi</i> sp. n. (p. 94) |
| 8 (3) | Shaft of aedeagus with two pairs of spines subapically on dorsal surface (Fig. 101) maculipennis sp. n. (p. 95) |
| - 9 (8) | Shaft of aedeagus with one pair or three spines subapically on dorsal surface |
| _ | single, short, apically obtuse spine at midline (Fig. 102) |
| 10 (9) - | Shaft of aedeagus long and slender; apical spines simple, long and curving |
| 11(10) | bifurcated, subsidiary process baso-laterally (Fig. 103) <i>jamaicensis</i> Distant (p. 91) Paramere with a large, rounded, secondary process on dorsal surface subbasally (Fig. 128) |
| - | Paramere without a secondary process (Fig. 129) morrisi sp. n. (p. 93) astarte sp. n. (p. 95) |
| | |

Dysimia maculata Muir

(Figs 9, 13, 29, 96, 108, 120)

Dysimia maculata Muir, 1924: 463. Holotype O, PUERTO RICO (BPBM) [examined].

Male: head 0.30 mm long, 0.40 mm wide; pronotum 0.80 mm wide; tegmen 3.60–3.75 mm long; wing 2.30 mm long. Female: tegmen 3.80–4.40 mm long.

Length of frons c. 8 times width at apex, 1.66 times width at base; ocelli small, distinct; clypeus c. three-quarters length of frons. Pronotal width c. 12 times mid-dorsal length.

Genae each with a broad, brown band at level of eye, darker at dorsal and ventral margins, extending horizontally to anterior margin; area around ocelli frequently brownish; frons with base occasionally dark brown. Fronto-lateral surfaces of pronotum each with a brownish band extending horizontally from

adjacent to eye to external margin. Tegmen and wing with bases of branches of veins and cross-veins brownish, cross-veins edged pale smoky brown; posterior and apical margins frequently very narrowly edged scarlet. Tegmen with a large, circular, dark brown spot over first branch of cubital vein at one-third length; a smaller spot between cubital vein and clavus at one-sixth length; another adjacent to and immediately basad of subcostal and fused radial-medial fork; a third small spot, more irregular and less distinct, around fused subcostal-radial-medial vein at one-third length. Wing with a prominent, circular, dark brown spot between cubital vein and clavus at one-quarter length.

Shaft of acdeagus slender, with two pairs of flap-like processes, the external pair each with a small, blunt, spine on ventral surface. Paramere with dorsal process situated slightly distad of midlength, slender, strongly produced postero-dorsally; dorsal surface at one-quarter length with a slender, regularly tapering, secondary process bearing long, robust, spines.

MATERIAL EXAMINED

Holotype ♂, **Puerto Rico**: Rio Piedras, viii.1923 (*Wolcott*) (BPBM). Paratypes. **Puerto Rico**: 26 ♂, 13 ♀, same data as holotype (BMNH); 1 ♂ (USNM).

This species has also been recorded from Haiti (Dozier, 1922). The specimens recorded by Ball (1928) from Florida are the newly described species *pseudomaculata* (p. 00). The two species are readily distinguished by the absence of the dark spot on the wing of *pseudomaculata*, and by the male genitalia.

Dysimia fuscoclypeata Fennah

Dysimia fuscoclypeata Fennah, 1952: 124. Holotype Q, VENEZUELA: Aragua, Rancho Grande, 1100 m, 1.x.1950 (Yepez) (lost). NEOTYPE Q, VENEZUELA, here designated (BMNH) [examined].

Female: head $0.30 \text{ mm} \log_2 0.42 \text{ mm}$ wide; pronotum 0.86 mm wide; tegmen $4.40 \text{ mm} \log_2 vige 2.60 \text{ mm} \log_2 0.000 \text{ mm}$ long. Male unknown.

Length of frons 7 times width at apex, 1.5 times width at base; ocelli distinct; clypeus c. as long as frons, 1.5 times width at base. Pronotal width c. 8 times mid-dorsal length; tegula weakly carinate.

Frons with apical half somewhat darker than basal half, with a dark brown transverse band at level of dorsal margin of eye and another at midline; genae irregularly reddish brown, with a dull brown band running from level of midline of eye to anterior margin; clypeus with basal quarter whitish, thence brown to junction with pale yellowish paraclypeus. Fronto-lateral surfaces of pronotum each with a broad brown band extending horizontally from adjacent to eye, terminating short of external margin; metanotum with fronto-lateral surfaces at level of clypeus pale brown. Tegmen and wing with cross-veins narrowly edged smoky brown. Tegmen with a very large, prominent, dark brown spot on first branch of cubital vein at one-third length; a much smaller spot adjacent and anterior to medial vein at equi-distance from base; two small spots at one-seventh length, one between fused subcostal, radial and medial veins and costal margin, and the other immediately posterior to cubital vein. Wing with a single, irregular, dark brown spot at two-fifths length, adjacent to and posterior to cubital vein.

MATERIAL EXAMINED

Neotype Q, Venezuela: Aragua, Camino, Choroni, 950 m, montane forest, 24.iii.1949 (Box) (BMNH).

This is the only specimen available for study. A pin with a label bearing the data of the holotype is in the BMNH, but the specimen is missing. With Dr Fennah's agreement I therefore designate the single paratype as a neotype.

As the name suggests, *fuscoclypeata* is readily distinguished by the dark pigmentation of the clypeus.

Dysimia numa Fennah

(Figs 95, 107, 119)

Dysimia numa Fennah, 1971: 324. Holotype O', CAYMAN ISLANDS (BMNH) [examined].

Male: head 0.28 mm long, 0.40 mm wide; pronotum 0.72 mm wide; tegmen 3.60–4.20 mm long; wing 2.00 mm long. Female: tegmen 4.00–4.60 mm long.

Length of frons 6 times width at apex, 1.5 times width at base; ocelli small, distinct; clypeus as long as frons. Pronotal width 10 times mid-dorsal length.

Head unmarked; pronotum with a pale fuscous transverse band parallel to posterior margin on dorsal

surface; fronto-lateral surfaces each with a very faint fuscous band extending horizontally from adjacent to dorsal margin of eye to lateral margin. Tegmen and wing with cross-veins and forks of veins faintly edged brownish. Tegmen with a large, prominent, roughly circular, brown spot over first branch of cubital vein at three-fifths length; a smaller, paler, irregular marking over apical fork of medial vein; two smaller spots, one between cubital vein and clavus, the other between point of separation of medial vein from fused subcostal-radial veins and costal margin; an irregular spot over medial and fused subcostal-radial veins at three-eighths length. Wing with a small dark brown spot immediately basad of one-third length, adjacent to cubital vein.

Shaft of aedeagus laterally expanded over apical one-third length, with three pairs of large spine-like processes. Paramere slender; apex acute; dorsal process situated at two-thirds length, greatly reduced, with a posteriorly directed spine on posterior surface at midlength; dorsal surface at one-third length with an apically rounded secondary process.

MATERIAL EXAMINED

Holotype O^{*}, Grand Cayman: N. Coast, N. Side, Hut Rd, 15.vii.1938 (*Lewis & Thompson*) (BMNH). Paratypes. Cayman Brac: 38 O^{*}, 33 Q, Statae [?] Bay (BMNH).

In his description Fennah erroneously refers to a single pair of spines on the aedeagus; his illustration correctly shows three.

This species is distinguished by the lack of dark pigmentation on the genae and pronotum, and by the structure of the male genitalia.

Dysimia jamaicensis Distant comb. n.

(Figs 103, 115, 127)

Mysidia jamaicensis Distant, 1907: 396. LECTOTYPE O', JAMAICA (BMNH), here designated [examined].

Male: head 0.38 mm long, 0.59 mm wide; pronotum 1.20 mm wide; tegmen 6.40 mm long; wing 3.50 mm long. Female unknown.

Length of frons 6 times width at apex, twice width at base; ocelli small, distinct; clypeus two-thirds longer than frons. Pronotal width 12 times mid-dorsal length; tegula carinate.

Genae and fronto-lateral surfaces of pronotum at level of eyes brown. Tegmen and wing with veins and cross-veins narrowly and irregularly edged pale brownish, posterior margins between veins broadly smoky brown, posterior marginal veins crimson. Tegmen with a large irregular brown spot over fork of second branch of medial vein; a smaller spot over apical fork of medial vein; another larger spot between first branch of cubital vein and vanal fold at approximately three-quarters length of clavus. Wing with cross-veins brown; an indistinct, broken, pale brownish, transverse band at one-third length.

Shaft of aedeagus bearing a pair of large, flap-like processes, each with an adjacent spine-like process dorsally and a small, apically bifurcate spine laterally. Paramere very slender; apex acute; dorsal process situated at midlength, apex posteriorly directed and reduced.

MATERIAL EXAMINED

Lectotype O', Jamaica: Moneague, 10.ii.1905 (Nicholl) (BMNH).

This species is included in *Dysimia* because of the tegminal venation and the proportions of the head. Its relatively large size and long wings, with the reduction in the dorsal process of the paramere and complex armature of the aedeagus, readily distinguish it.

Dysimia pseudomaculata sp. n.

(Figs 97, 109, 121)

[Dysimia maculata Muir sensu Ball, 1928: 199. Misidentification.]

Male: head $0.30 \text{ mm} \log_{10} 0.40 \text{ mm}$ wide; pronotum 0.84 mm wide; tegmen $3.58-3.78 \text{ mm} \log_{10}$; wing $2.40 \text{ mm} \log_{10}$. Female: tegmen $4.20-4.40 \text{ mm} \log_{10}$.

Length of frons 6 times width at apex, 1.5 times width at base; ocelli small or obsolete; clypeus slightly shorter than frons. Pronotal width 10 times mid-dorsal length.

Head ventral to dorsal margins of eyes brown, genae lacking distinct darker markings. Fronto-lateral surfaces of pronotum ventral to horizontal carinae pale dull brownish. Tegmen and wing with veins and cross-veins predominantly pale brown; marginal veins very narrowly crimson, broadly and irregularly

edged pale smoky brown. Tegmen with a very large, prominent, circular, dark brown spot over first branch of cubital vein immediately basad of level of apex of clavus; a small, dark brown spot between cubital vein and claval suture subbasally; a somewhat smaller spot on costal cell immediately basad of point of separation of fused radial and medial veins; a small, indistinct spot over medial vein at one-third length; an irregular, fainter spot covering apical forks of medial and radial veins; bases of branches of medial vein occasionally dark brown. Wing lacking a dark brown spot between cubital vein and clavus; irregularly tinged pale smoky brown at approximately one-third length, level of cubital fork, and over apical one-quarter length.

Shaft of aedeagus strongly dorsally and laterally expanded subapically, devoid of spines. Paramere slender; apex acute; dorsal process situated at midlength, apex strongly produced posteriorly; dorsal surface slightly basad of one-third length with a secondary process bearing a few long, robust, spines.

MATERIAL EXAMINED

Holotype O, U.S.A.: Florida, Sanford, 19.xi.1927 (Ball) (USNM).

Paratypes. 4 0° , 3 9, same data as holotype (USNM; BMNH).

The genitalic differences are consistent, though not great, but the lack of a prominent dark spot on the wing of *pseudomaculata* renders the species readily distinguishable.

Dysimia muiri sp. n.

(Figs 98, 110, 122)

Male: head $0.24 \text{ mm} \log_{10} 0.41 \text{ mm}$ wide; pronotum 0.70 mm wide; tegmen $3.50-3.60 \text{ mm} \log_{10}$; wing $2.15 \text{ mm} \log_{10}$. Female: tegmen $3.60-4.00 \text{ mm} \log_{10}$.

Length of frons 8 times width at apex, twice width at base; ocelli obscure; clypeus slightly shorter than frons. Pronotal width 10 times mid-dorsal length.

Genae each with a horizontal dark brown band extending from adjacent to dorsal margin of eye to anterior margin, a similar band at level of ventral margin of eye; frons occasionally dark brown between lateral carinae; fronto-lateral surfaces of pronotum each with a pale brown horizontal band extending from adjacent to eye to lateral margin. Tegmen and wing with veins and cross-veins prominently edged grey-brown, apical and posterior margins fuscous between veins. Tegmen with a very large, prominent, roughly circular, dark brown spot near posterior margin between first branch of cubital vein and clavus; a smaller, brownish spot on medial vein at equal distance from base. Wing lacking distinct spots.

Shaft of aedeagus slender; apex laterally expanded, devoid of spines or flap-like processes. Paramere slender, apex acutely rounded; dorsal process large, situated at midlength, greatly produced posteriorly; dorsal surface subbasally with a membranous secondary process.

MATERIAL EXAMINED

Holotype O^{*}, **Jamaica**: Portland, Somerset Falls, 8.xii.1975 (*O'Brien & Marshall*) (FAMU). Paratypes. 28 O^{*}, 19 Q, same data as holotype (FAMU; BMNH).

This species is readily distinguished by the pigmentation of the tegmen, lack of dark spots on the wing, and by the structure of the male genitalia.

Dysimia obrieni sp. n.

(Figs 102, 114, 126)

Male: head 0·26 mm long, 0·36 mm wide; pronotum 0·70 mm wide; tegmen 3·60 mm long; wing 2·00 mm long. Female: tegmen 3·90–4·00 mm long.

Length of from 7 times width at apex, c. twice width at base; ocelli obsolete; clypeus slightly shorter than froms. Pronotal width 10 times mid-dorsal length.

Genae each with a dark brown band extending from level of dorsal margin of eye to anterior margin, a similar band level with ventral margin of eye. Tegmen and wing with veins, cross-veins and posterior margins narrowly edged smoky brown; apical cells fuscous; posterior marginal veins very narrowly scarlet. Tegmen with a prominent, roughly circular, dark brown spot on first branch of cubital vein at level of apex of clavus; a smaller spot near base of cubital vein; another immediately basad of point of separation of fused subcostal, radial and medial veins; a fourth at c. midlength. Wing lacking conspicuous spots.

Shaft of aedeagus slightly asymmetrical; with a pair of large, flap-like processes, each bearing a single, large, curving spine; a slender acute spine medially. Paramere very slender; dorsal process situated at midlength, apex produced postero-dorsally; dorsal surface subbasally with a conical secondary process.

Holotype O, Costa Rica: Turialba, 21.vi.1974 (O'Brien & Marshall) (FAMU).

Paratypes. 3 Q, same data as holotype (FAMU; BMNH).

This species is readily distinguished by the prominent brown spot on the first branch of the cubital vein of the tegmen coupled with the absence of a corresponding spot on the wing, and by the structure of the male genitalia.

Dysimia morrisi sp. n.

(Figs 104, 116, 128)

Male: head $0.29 \text{ mm} \log_{10} 0.47 \text{ mm}$ wide; pronotum 0.88 mm wide; tegmen $4.20-4.30 \text{ mm} \log_{10}$; wing $2.40 \text{ mm} \log_{10}$ Female: tegmen $4.50-4.60 \text{ mm} \log_{10}$.

Length of frons 8 times width at apex, 1.5 times width at base; ocelli indistinct; clypeus slightly shorter than frons. Pronotal width slightly less than 10 times mid-dorsal width.

Genae each with a broad, dark brown band extending horizontally from level of dorsal margin of eye to anterior margin, another at level of ventral margin of eye. Fronto-lateral surfaces of pronotum each with a broad brownish band extending from adjacent to eye to exterior margin. Tegmen and wing with cross veins narrowly edged pale brown, posterior margins very narrowly scarlet. Tegmen with a large, roughly circular, dark brown spot on first branch of cubital vein at level with apex of clavus; a much smaller spot on medial vein at same level; another at two-thirds length of fused subcostal, radial, and medial veins; another of intermediate size between cubital vein and vanal fold at midlength between base and first fork; area around apical fork of medial vein irregularly pale brown. Wing lacking distinct dark spots.

Shaft of aedeagus slightly asymmetrical; a pair of large, flap-like processes, each bearing a single, large, curving spine mid-dorsally. Paramere slender, apex narrowly rounded; dorsal process large, situated at midlength, apex slender, strongly produced posteriorly; dorsal surface at one-quarter length with a large rounded secondary process bearing long robust spines.

MATERIAL EXAMINED

Holotype \mathcal{O} , **Ecuador**: Naranjapata, 1850 ft, xii.1922 (*Williams*) (BMNH). Paratypes. 4 \mathcal{O} , 4 \mathcal{Q} , same data as holotype (BMNH).

The pigmentation of this species closely resembles that of *obrieni*, but it is distinguished by its larger size and by the structure of the male genitalia.

Dysimia distincta sp. n.

(Figs 94, 106, 118)

Male: head $0.30 \text{ mm} \log_{10} 0.44 \text{ mm}$ wide; pronotum 0.76 mm wide; tegmen $3.60-3.80 \text{ mm} \log_{10}$; wing $2.20 \text{ mm} \log_{10}$ Female unknown.

Length of frons c. 8 times width at apex, twice width at base; ocelli distinct; clypeus c. three-quarters length of frons. Pronotal width c. 9 times mid-dorsal length.

Genae each with a dark brown band extending horizontally from level of dorsal margin of eye to anterior margin; another similar band at level of ventral margin of eye. Fronto-lateral surfaces of pronotum each with a broad brown band extending from adjacent to eye horizontally to exterior margin; tegula with ventral margin narrowly brown; abdomen with a large, circular, dark brown spot on either side of midline subapically on dorsal surface. Tegmen and wing with cross-veins broadly edged very pale brown. Tegmen with anterior and posterior margins very narrowly and intermittently tinged reddish; a large, circular, dark brown spot on cubital vein at one-third length; a somewhat smaller spot on medial vein equidistant from base; an irregular spot over apical fork of medial vein; two smaller spots, one adjacent to fused subcostal, radial and medial veins at one-fifth length, the other posterior to cubital vein equidistant from base. Wing with posterior margin narrowly tinged reddish, a small brown spot immediately posterior to cubital vein at one-third length.

Shaft of aedeagus lacking spine-like processes, laterally somewhat expanded over apical one-half length; dorsal surface subapically with a transverse, membranous, flap-like process, partially overlying a pair of slender, projections situated one on either side of midline. Paramere complex, robust; dorsal process very large, situated immediately distad of mid-length, apex strongly produced posteriorly, bearing a large, robust, internally curving, hook-like process dorsally; dorsal surface basad of midlength with a shallowly bifurcate secondary process.

Holotype O', **Puerto Rico**: 8 miles E. of Mayaguez, 9.ii.1969 (O'Brien) (FAMU). Paratype. **Puerto Rico**: 1 O', Rio Piedras, 4.xii.1968 (*Telford & Medina*) (BMNH).

Although very similar in external characters to *fennahi* and *telfordi*, this species is readily distinguished by the unique development of the paramere, which here reaches a degree of complexity not seen elsewhere during the present study.

Dysimia fennahi sp. n.

Male: head $0.29 \text{ mm} \log, 0.42 \text{ mm}$ wide; pronotum 0.80 mm wide; tegmen $3.60 \text{ mm} \log$; wing $2.00 \text{ mm} \log$. Female unknown.

Length of frons c. 8 times width at apex, twice width at base; ocelli obscure; clypeus three-quarters length of frons. Pronotal width slightly less than 8 times mid-dorsal length.

Genae each with a dark brown band running horizontally from level of dorsal margin of eye to anterior margin, another similar parallel band at level of ventral margin of eye. Fronto-lateral surfaces of pronotum each with a broad dark brown band running horizontally from adjacent to eye to exterior margin; tegula with ventral margin broadly dark brown; abdomen with a large, rather irregular, dark brown spot on either side of midline subbasally on dorsal surface. Tegmen and wing with veins and cross-veins narrowly and intermittently edged brownish, anterior and posterior margins very narrowly and irregularly flecked pale reddish. Tegmen with a large, roughly circular, dark brown spot on first branch of cubital vein at approximately one-third length; a somewhat smaller spot on medial vein equidistant from base; an irregularly shaped, brownish marking over apical fork of medial vein; two small, dark brown spots, one adjacent to fused subcostal, radial and medial veins, the other on cubital vein subbasally. Wing with a small, circular, dark brown spot adjacent to cubital vein at one-third length.

Shaft of aedeagus with apical third length weakly expanded dorso-laterally; dorsal surface subapically with a large, transverse, flap-like process and a pair of spine-like processes adjacent to midline. Paramere massive; apex acutely rounded; dorsal process situated at two-thirds length, apex slender and strongly produced postero-dorsally; dorsal surface with a well-developed secondary process slightly basad of midlength.

MATERIAL EXAMINED

Holotype O, Puerto Rico: 8 miles E. of Mayaguez, 9.ii.1969 (O'Brien) (FAMU).

Externally, this species closely resembles *telfordi*, from which it is most readily distinguished by the structure of the male genitalia, where the reduction in the armature of the aedeagus is accompanied by massive development of the paramere.

Dysimia telfordi sp. n.

(Figs 100, 112, 124)

Male: head $0.26 \text{ mm} \log_{10} 0.42 \text{ mm}$ wide; pronotum 0.75 mm wide; tegmen $3.40-3.60 \text{ mm} \log_{10}$; wing $2.16 \text{ mm} \log_{10}$ Female unknown.

Length of frons 7 times width at apex, twice width at base; ocelli indistinct; clypeus three-quarters length of frons. Pronotal width c. 8 times mid-dorsal length.

Genae each with a dark brown band extending horizontally from adjacent to dorsal margin of eye to anterior margin, a similar band at level of ventral margin of eye, these bands continued over frons; fronto-lateral surfaces of pronotum each with a broad pale brown band extending horizontally from adjacent to eye to lateral margin; tegula with ventral margin dark brown; abdomen with a large, roughly circular, dark brown spot on either side of midline subapically on dorsal surface. Tegmen and wing with cross-veins narrowly edged pale smoky brown. Tegmen with anterior and posterior marginal veins crimson; a large, circular, dark brown spot on first branch of cubital vein at one-third length; a rather similar spot on medial vein equidistant from base; another over apical fork of medial vein; two smaller spots, one immediately anterior to point of separation of fused subcostal, radial and medial veins, the other posterior to cubital vein subbasally. Wing with posterior marginal vein crimson; a small, distinct, circular, brown spot immediately posterior to cubital vein at one-third length.

Shaft of aedeagus weakly expanded over apical two-fifths length; dorsal surface subapically with a transverse, flap-like, membranous projection, partially obscuring a pair of short, blunt, spine-like processes medially. Paramere robust; dorsal process situated at three-quarters length, strongly produced posteriorly; dorsal surface at midlength with an apically bifurcate secondary process.

Holotype \bigcirc , **Puerto Rico**: Rio Piedras, 4.xii.1968 (*Telford & Medina*) (FAMU). Paratypes. 5 \bigcirc , 1 \bigcirc , same data as holotype (FAMU; BMNH).

Closely resembling *fennahi* in external characters, this species may be distinguished by its smaller size; though the structure of the aedeagus differs only slightly, that of the paramere is quite distinct.

Dysimia astarte sp. n.

(Figs 105, 117, 129)

Male: head $0.29 \text{ mm} \log_{10} 0.40 \text{ mm}$ wide; pronotum 0.74 mm wide; tegmen $3.80-3.95 \text{ mm} \log_{10}$; wing $2.30 \text{ mm} \log_{10}$. Female: tegmen $4.10-4.40 \text{ mm} \log_{10}$.

Length of frons c. 6 times width at base; c. 2.5 times width at base; ocelli large, not prominent; clypeus two-thirds length of frons. Pronotal width 9 times mid-dorsal length.

Genae each bearing an irregular dark brown band adjacent to dorsal margin of eye, this band often extending onto frons, a similar, broader band level with midline of eye; ocelli pale; apices of second antennal segments brownish. Fronto-lateral surfaces of pronotum adjacent to eyes narrowly and irregularly dark brown; mesonotum with a large, irregular, pale brown spot on each side ventro-laterally. Tegmen and wing with cross-veins brownish, narrowly edged pale brown, marginal veins yellowish. Tegmen very faintly and irregularly mottled greyish brown distad of medial-cubital cross-vein; with a small, circular, dark brown spot on subcostal cell, between cubital vein and claval suture at one-sixth length, another over medial vein at slightly basad of one-third length, a fourth, rather larger and more irregular spot over first branch of cubital vein at one-third length. Wing with a small, irregular, brown spot between cubital vein and claval suture at slightly basad of two-fifths length.

Shaft of aedeagus not apically expanded; with a pair of large, flap-like processes extending ventrally over lateral surfaces; a pair of acute, spine-like processes adjacent to midline. Paramere slender; apex acute; dorsal process large, situated at approximately midlength.

MATERIAL EXAMINED

Holotype ♂, **Venezuela**: San Esteban, Carabobo, 2.ii.1920 (*Williamson & Ditzler*) (USNM). Paratypes. 3 ♂, 2 ♀, same data as holotype (USNM; BMNH).

This species is readily distinguished by the pigmentation of the fronto-lateral surfaces of the pronotum, and by the structure of the male genitalia.

Dysimia maculipennis sp. n.

(Figs 101, 113, 125)

Male: head 0.22 mm long, 0.38 mm wide; pronotum 0.68 mm wide; tegmen 3.20 mm long; wing 1.88 mm long. Female: tegmen 3.80-4.10 mm long.

Length of frons 8 times width at apex, twice width at base; ocelli small, distinct; clypeus two-thirds length of frons. Pronotal width 10 times mid-dorsal length.

Genae at level of eyes each with a broad, horizontal brown band, darkest at upper and lower margins, extending from adjacent to eye to anterior margin and continuing across frons; head dorsad of upper margins of eyes very pale, whitish. Fronto-lateral surfaces of pronotum whitish dorsally, each with a broad, dark brown band extending horizontally from adjacent to eye to external margin. Tegmen and wing with bases of branches and cross-veins pale brown, weakly bordered smoky brown; very narrowly edged crimson on posterior and apical margins. Tegmen with a large, circular, dark brown spot on cubital vein at one-third length; two smaller spots at one-sixth length, one on cubital vein, the other exterior and adjacent to fused subcostal, radial and medial veins; an intermediately sized spot over cross-vein linking second and third branches of medial vein; a small, irregular marking around separation of subcostal and fused radial and medial veins. Wing with a pale brown spot immediately distad of first fork of cubital vein.

Shaft of aedeagus slender in dorsal aspect; a pair of large, flap-like processes, each bearing a pair of long, robust spines dorso-laterally. Paramere slender; apex narrowly rounded; dorsal process situated at midlength, apex strongly produced posteriorly, dorsal surface at one-quarter length with an irregularly rounded secondary process bearing scattered, robust spines.

Holotype \bigcirc , **Ecuador**, Tena, 4.iii.1923 (*Williams*) (BMNH). Paratypes. 1 \bigcirc , 2 \bigcirc , same data as holotype (BMNH; BPBM).

The four specimens in the series bear 'paratype' labels similar to those used by Muir, and the series is labelled as '*maculipennis* Muir'; however, a search of the literature reveals no record of this name ever having been published by Muir. The name *maculipennis* is used here to avoid any possible confusion.

This species is distinguished by the pigmentation of the head and tegmen, and by the structure of the male genitalia.

Nomen dubium

Dysimia putilla Fennah

Dysimia putilla Fennah, 1952: 124. Holotype Q, ST LUCIA (BMNH) [examined].

Female: tegmen 4.40 mm long; wing (damaged) 2 + mm long.

Head lost. Pronotum with fronto-lateral surfaces distinctly carinate.

Tegmen and wing with veins pale brown. Tegmen with a small, circular, brownish spot on medial vein at one-third length; another, slightly larger spot on first fork of cubital vein equidistant from base; another adjacent to apical fork of medial vein; smaller and less distinct pale brownish markings at level of separation of medial from fused radial and subcostal veins, and at midlength of cubital vein. Wing with a small, roughly circular, pale brown spot adjacent to and basad of first fork of cubital vein.

MATERIAL EXAMINED

Holotype Q, St. Lucia: Quilesse, mountain forest, 1000 ft, 22.ii.1941 (Fennah) (BMNH).

This species was described from a unique female of which only a few fragments stored in alcohol now remain, thus making an adequate re-description impossible. Fennah stressed the similarity of the species to *maculata*, but also the differences in its markings; in his description he stated:

Basad portion of frons, excluding the secretory pits, a single narrow stripe on side of head before eyes, a minute spot on genae above base of antennae, dark fuscous. A broad area on lateral lobes of pronotum, posterior margin of tegulae, and a slight suffusion on mesonotum light sepia-brown to fuscous; abdomen with third segment sublaterally, fourth prominently laterally and with four short antero-posterior stripes between them, fifth with four paler spots, and sixth with two pale submedian spots and two spots laterally fuscous. *and* [Tegminal] veins interruptedly and diffusely overlain with fuscous.

The subgenital sternite is figured, and described as: . . . produced caudad in a subequilaterally triangular lobe with the apex shortly truncate.

DYSIMIELLA gen. n.

Type-species: Dysimiella pennyi sp. n.

Width of head one-quarter to two-thirds greater than length in dorsal aspect. Vertex c. 1-25 times as long as wide; lateral margins strongly and regularly converging from base to level of anterior margins of eyes, thence parallel to junction with frons; extending for c. one-third its length beyond anterior margins of eyes; base very deeply incised medially; lateral carinae very prominent. Length of frons 9 times width at apex, c. twice width at base; junction with vertex broadly and regularly rounded; lateral margins from apex initially gradually and regularly diverging, then abruptly and strongly diverging to base; carinae very prominent. Genae extending anterior to eyes for c. one-third to one-half horizontal diameter of eye. Second antennal segment club shaped, c. 1.5 times as long as wide; apex truncate; flagellum arising apically. Ocelli prominent or obsolete. Clypeus short and broad, shorter than frons, as long as basal width; medial carina obsolete; lateral carinae distinct basally. Rostrum not extending beyond hind coxae.

Pronotal width 11–24 times mid-dorsal length, strongly constricted medially; fronto-lateral surfaces each with a single carina curving horizontally from adjacent to midline of eye to lateral margin. Tegula with carina weak or absent. Disc of mesonotum slightly wider than long; medial carina weak; lateral carinae obsolete or absent.

Tegmen short and broad; length 4.00–5.20 mm, little greater than twice width. Cubital vein with four branches extending to posterior margin; first and second, and third and fourth linked by cross-veins.

Medial vein fused with radial and subcostal veins over basal one-fifth length; forking at two-fifths and three-fifths length and apically; with seven branches extending to posterior and apical margins; first fork linked to cubital vein by a short cross-vein subbasally; linked to radial vein by a cross-vein slightly distad of second fork. Radial vein fused to subcostal vein over basal two-fifths length; two branches extending to apical margin; linked to subcostal vein by a cross-vein subapically.

Wing short and broad; length two-thirds that of tegmen, twice maximum width; apex broadly truncate. Cubital vein with three branches extending to posterior margin. Medial vein unbranched, linked to cubital by a cross-vein slightly distad of the second fork of the latter. Radial vein unbranched, linked to medial by a single cross-vein slightly basad of three-quarters length.

Male genitalia with shaft of aedeagus horizontal, cylindrical, symmetrical, heavily armed on dorsal surface subapically. Paramere with dorsal process well developed. Subgenital plate with posterior margin narrowly and prominently produced at midline.

Dysimiella is represented in Brazil and Guyana. The venation of the tegmen and the distinctive proportions of the head and pronotum indicate a close relationship to *Dysimia*; the structure of the male genitalia, in particular the subgenital plate, is unique.

Key to species of Dysimiella

- Tegmen and wing with distinct dark transverse bands. Aedeagus with three pairs of spines (Fig. 154)......
 Tegmen and wing without distinct transverse markings. Aedeagus with large flap-like processes
- and a single pair of long slender spines (Fig. 155)...... *pennyi* sp. n. (p. 97)

Dysimiella williamsi sp. n.

(Figs 3, 17, 32, 154, 156, 158)

Male: head 0.38 mm long, 0.48 mm wide; pronotum 0.90 mm wide; tegmen 4.00–4.20 mm long; wing 2.65 mm long. Female: tegmen 4.60–4.80 mm long.

Length of frons 9 times width at apex, c. twice width at base; ocelli obsolete; clypeus slightly shorter than frons. Pronotal width c. 11 times mid-dorsal length, fronto-lateral carinae distinct; tegula weakly carinate.

Genae each with a brown band extending horizontally from adjacent to centre of eye to anterior margin. Fronto-lateral surfaces of pronotum each with a brown band extending horizontally from adjacent to midline of eye to lateral margin, and continued over lower surface of tegula. Tegmen and wing whitish hyaline, cross-veins edged dark brown. Tegmen with a broad, irregular, pale brownish, transverse band at one-fifth length; apical fork of medial vein covered by a large, very prominent, dark brown spot; costal and posterior margins very narrowly, regularly intermittently, flecked with crimson. Wing with a distinct, very pale brown, transverse band at one-quarter length, posterior margin very narrowly flecked with crimson.

Shaft of aedeagus slender, with three pairs of strong, curving spines subapically. Paramere robust; dorsal process situated slightly distad of midlength, apex strongly produced postero-dorsally; dorsal surface without a secondary process. Subgenital plate with posterior margin strongly and narrowly produced medially into a very long, slender, apically acute spine.

MATERIAL EXAMINED

Holotype O, Brazil: Para, Jabaty, v.1924 (Williams) (BMNH).

Paratypes. Brazil: 11 0, 17 9, same data as holotype; nr Manaus (BMNH; INPA).

This species is readily distinguished by the prominent markings on the tegmen, and by the structure of the male genitalia.

Dysimiella pennyi sp. n.

(Figs 155, 157, 159, 160)

Male: head $0.34 \text{ mm} \log_{10} 0.55 \text{ mm}$ wide; pronotum 1.01 mm wide; tegmen $4.62 \text{ mm} \log_{10}$; wing $3.15 \text{ mm} \log_{10}$. Female: tegmen $5.10 \text{ mm} \log_{10}$.

Length of frons 9 times width at apex, 1.66 times width at base; ocelli large, prominent; clypeus three-fifths as long as frons. Pronotal width 24 times mid-dorsal length, fronto-lateral carinae weak; tegula not carinate.

Head and body pale yellowish brown; lateral carinae of frons, tibiae and tarsi darker brownish. Tegmen and wing hyaline, veins pale. Tegmen with veins and cross-veins narrowly edged pale smoky brown, with a

darker brownish spot over point of separation of fused radial and subcostal veins, another over apical forks of radial and medial veins, apical cells between branches of radial and medial veins each with a slender, longitudinal, brownish stripe medially. Wing unmarked. Female with subgenital plate dark brownish, ventro-lateral angles of adjacent segment brownish black.

Shaft of aedeagus slender, broadening slightly at two-thirds length; a large, rounded, flap-like process medially, bearing on each side posteriorly a very long curving spine; lateral surfaces each produced into an acute, ventrally directed flap. Paramere slender; apex narrowly rounded; dorsal process situated at two-thirds length, dorsally produced but hardly inclined posteriorly; dorsal surface strongly and obtusely produced at midlength, acutely produced subapically. Subgenital plate narrowly produced medially into a long, slender, apically somewhat expanded and deeply and narrowly notched, spine-liked process.

MATERIAL EXAMINED

Holotype O^{*}, **Brazil**: Amazonas, P. das Laranjeiras, 28.vii.1981 (*Arias*) (INPA). Paratypes. 2 Q, same data as holotype (INPA; BMNH).

This species is readily distinguished by the lack of a distinct transverse band on the tegmen, and by the structure of the male genitalia, including the medial process of the subgenital plate.

MYSIDALOIDES gen. n.

Type-species: Mysidaloides trinidadensis sp. n.

Width of head in dorsal aspect greater than 1.5 times length. Vertex hardly extending anterior to eyes; lateral margins weakly carinate, very abruptly converging from base to level of midline of eyes, then gradually and regularly converging to apex; basal margin transverse; junction with frons broadly and regularly rounded. Frons exceeding narrow apically; length greater than 10 times width at apex, less than 3 times width at base; lateral margins strongly carinate, parallel from apex to level of ventral margins of eyes, then strongly diverging to base. Genae extending anterior to eyes for one-eighth horizontal diameter of eye. Eyes extremely large, prominent, almost hemispherical. Antenna cylindrical; second segment more than 5 times as long as wide; flagellum arising at c. two-thirds length; apex acutely rounded. Ocelli very small, not prominent. Rostrum terminating somewhat posterior to hind coxae.

Pronotal width more than 20 times mid-doral length; very deeply and regularly constricted medially; fronto-lateral surfaces each with a distinct carina curving horizontally from adjacent to midline of eye to lateral margin. Tegula not carinate. Disc of mesonotum broader than long; not distinctly carinate.

Tegmen 3 times as long as wide. Medial vein separating from fused radial and subcostal veins at one-eighth length; radial and subcostal veins separating slightly distad of one-third length. Radial vein with two branches extending to apical margin, linked to medial vein by a cross-vein at two-thirds length and at level of apical fork. Medial vein forking slightly basad of, and again slightly distad of, midlength; with seven branches extending to apical and posterior margins, second and third, and fourth and fifth linked by cross-veins. Cubital vein with four branches extending to posterior margin, first linked to apex of clavus and to second, second to third, third to fourth, and fourth to first branch of medial vein by cross-veins.

Length of wing slightly greater than one-half of that of tegmen. Radial and subcostal veins fused over c. basal one-third length. Radial vein unbranched, linked to medial vein by a cross-vein at two-thirds length. Medial vein distinct throughout, with two branches extending to apical margin, linked to third branch of cubital vein by a cross-vein slightly distad of midlength. Cubital vein with three branches extending to posterior margin.

Head and body uniformly pale, lacking distinct markings. Tegmen and wing hyaline, also lacking distinct markings.

Male genitalia with shaft of aedeagus horizontal, cylindrical, symmetrical, slender; dorsal surface subapically bearing well-developed flap-like and spine-like processes. Paramere with dorsal process well developed, without a distinct secondary process; ventral surface unarmed. Anal tube little produced posteriorly. Female with posterior margin of subgenital plate not produced posteriorly.

The venation of the tegmen and wing of this genus is similar to that of *Mysidia*, but it differs in head characters, in particular the large size of the eyes, the very slender apical portion of the frons and the extreme length of the antennae. The genus is monotypic and is known from Brazil, Guyana and Trinidad.

Mysidaloides trinidadensis sp. n.

(Figs 10, 16, 24, 130, 131, 132)

Male: head 0·38 mm long, 0·65 mm wide; pronotum 1·32 mm wide; tegmen 6·30 mm long; wing 3·40 mm long. Female: tegmen 7·40 mm long.

Length of frons 12 times width at apex, 2.33 times width at base; ocelli indistinct; clypeus as long as frons. Pronotal width 22 times mid-dorsal length, fronto-lateral carinae distinct; tegula without carinae.

Head and body unmarked. Tegmen and wing hyaline, veins pale yellow. Tegmen unmarked except for a very indistinct, pale smoky, transverse band extending from second branch of cubital vein to apex of clavus. Wing with posterior margin between branches of cubital vein and apex of radial vein pale smoky brown, otherwise unmarked.

Shaft of aedeagus somewhat expanded subapically; dorsal surface subapically with a pair of large, flap-like processes extending to midlength, each terminating in an antero-dorsally directed projection at midline; a pair of diverging spines at midlength. Paramere basally slender, apex broadly rounded; dorsal process situated slightly distad of midlength, not greatly produced posteriorly; dorsal surface at approximately one-third length with a low, rounded projection bearing a cluster of robust, internally directed spines.

MATERIAL EXAMINED

Holotype O', Guyana: Tumatumari, 19.vii.1923 (Williams) (BMNH).

Paratypes. Guyana: 1 o^{*}, same data as holotype (BMNH). Trinidad: 1 o^{*}, Aripo Valley (BMNH). Brazil: 9 o^{*}, Amazonas, Manaus (INPA; BMNH).

NEOMYSIDIA gen. n.

Type-species: Neomysidia willisi sp. n.

Width of head considerably greater than length in dorsal aspect. Vertex slightly longer than wide at base; extending less than one-quarter its length beyond anterior margins of eyes; lateral carinae low, very gradually converging from base to apex; basal margin very weakly concave; junction with frons broadly and regularly rounded. Frons parallel-sided from apex to immediately above base, thence lateral margins strongly divergent; *c*. 2.5 times as long as width at apex, little longer than width at base. Genae extending beyond anterior margins of eyes for one-third horizontal diameter of eye. Second antennal segment ovate, *c*. twice as long as broad; apex rounded; flagellum arising subapically. Ocelli large and distinct. Clypeus broad, rounded, longer than frons; length one and two-thirds width at base; lacking distinct medial and lateral carinae. Rostrum terminating at level of mid coxae.

Pronotal width slightly greater than 7 times length mid-dorsally; not strongly constricted medially; fronto-lateral surfaces each with a distinct carina curving horizontally from adjacent to eye to lateral margin. Tegula not carinate. Disc of mesonotum c. 1.5 times as wide as long; broadly triangular; medial carina distinct only at midlength; lateral carinae absent or obsolete.

Tegmen length c. 6 mm, 2-5 times maximum breadth. Medial vein distinct from fused radial and subcostal veins throughout; forking slightly basad and slightly distad of midlength, with seven branches extending to posterior and apical margins. Radial and subcostal veins separating at midlength; radial with two branches extending to apical margin; linked to subcostal vein by a cross-vein subapically, and to medial vein at c. two-fifths length. Cubital vein with four branches extending to posterior margin, the first and second, and third and fourth linked by cross-veins (Fig. 6).

Wing almost twice as long as wide, more than half length of tegmen; apex rounded. Subcostal and radial veins fused from base to slightly basad of midlength, unbranched; radial vein linked to medial by a cross-vein slightly distad of midlength. Medial vein with two branches extending to post-apical margin; linked to cubital vein by a cross-vein at *c*. midlength. Cubital vein two branched.

Male genitalia with shaft of aedeagus horizontal, symmetrical; dorsal surface heavily armed subapically. Paramere with dorsal process reduced; dorsal surface with a secondary process subbasally.

This genus is readily distinguished by the proportions of the head; especially the very short and broad frons, the relatively unconstricted dorsal surface of the pronotum, and the short, triangular, mesonotal disc.

Known only from Brazil.

Neomysidia willisi sp. n.

(Figs 6, 18, 31, 161, 165, 169)

Male: head 0.42 mm long, 0.71 mm wide; pronotum 1.58 mm wide; tegmen 6.20 mm long; wing 3.50 mm long. Female unknown.

Length of frons 2.5 times width at apex, one-quarter greater than width at base; ocelli large, distinct; clypeus one-third longer than frons. Pronotal width 7.5 times mid-dorsal length.

Vertex, genae ventral to eyes, antennae, base of frons, lateral surfaces of clypeus, a small spot on fronto-lateral surfaces of pronotum above each eye, and dorsal margins of tegula dark brown. Tegmen and wing hyaline, veins pale yellowish, cross-veins very narrowly dark brown, posterior and apical margins with dark brown spots over apices of veins. Tegmen with radial, medial and cubital areas basally irregularly mottled dark smoky brown; an irregular dark brown spot immediately distad of apex of clavus; a very dark, almost black spot over apical fork of medial vein. Wing with a short, oblique, irregular, transverse smoky brown band over medial-cubital cross-vein; a broad, indistinct, olique, pale smoky brown, transverse band at somewhat distad of three-quarters length.

Shaft of aedeagus robust; a pair of massive flap-like processes situated one on either side of midline, each terminating anteriorly in a small acute point. Paramere robust; apex acutely rounded; dorsal process situated at midlength, greatly reduced; present only as a slight projection; dorsal surface subbasally with a curving posteriorly directed, hook-like secondary process; ventral and lateral surfaces subbasally with very numerous, tiny, tooth-like projections.

MATERIAL EXAMINED

Holotype O, Brazil: Amazonas, P. das Laranjeiras, 28.vii.1981 (Arias) (INPA).

IPSEMYSIDIA gen. n.

Type-species: Ipsemysidia beautifica sp. n.

Width of head in dorsal aspect greater than 1.5 times length. Vertex little longer than width at base, extending less than one-third its length beyond anterior margins of eyes; lateral margins not highly elevated, very gradually and regularly converging from base; basal margin shallowly concave; junction with frons weakly angulate. Frons c. 3 times as long as width at apex, c. twice width at base; lateral margins weakly diverging from apex to level of midline of eyes, then very strongly diverging to base. Genae extending anterior to eyes for c. half horizontal diameter of eye. Second antennal segment c. 1.5 times as long as broad, rounded; flagellum arising subapically. Ocelli distinct, not prominent. Clypeus short, broadly rounded, little longer than frons; medial and lateral carinae obsolete or absent. Rostrum not extending beyond hind coxae.

Pronotal width less than 10 times mid-dorsal length; dorsal surface little constricted medially; frontolateral surfaces each with a somewhat sinuate carina extending horizontally from adjacent to midline of eye to lateral margin. Tegula not carinate. Disc of mesonotum considerably wider than long; medial carinae weak, lateral carinae absent.

Tegmen more than 6 mm long, c. 3 times maximum width. Fused radial and subcostal veins separating at c. midlength. Medial vein distinct from base, forking at c. midlength and two-thirds length, with seven branches extending to posterior and apical margins, first branch linked to cubital vein, second to third by cross-veins. Radial vein with two branches extending to apical margin, linked to medial by a cross-vein slightly distad of two-thirds length. Cubital vein with four branches extending to posterior margin, first and second, and third and fourth linked by cross-veins.

Length of wing more than half that of tegmen, c. twice maximum width; apex acutely rounded. Subcostal and radial veins fused from base to c. midlength, unbranched; radial linked to medial vein by a cross-vein slightly distad of two-thirds length. Medial vein with two branches extending to post-apical margin, linked to cubital by a cross-vein at level of second fork of the latter. Cubital vein with three branches extending to posterior margin.

Male genitalia with shaft of aedeagus symmetrical, horizontal; dorsal surface heavily armed subapically, including a single process at midline. Paramere with dorsal process reduced; a hook-like secondary process on dorsal surface subbasally.

Though resembling *Neomysidia* in the development of the paramere, *Ipsemysidia* is readily distinguished by external and aedeagal characters. It is recorded from Brazil and Panama.

Ipsemysidia beautifica sp. n.

(Figs 8, 21, 26, 162, 166, 170)

Male: head 0.42 mm long, 0.65 mm wide; pronotum 1.50 mm wide; tegmen 6.00 mm long; wing 3.60 mm long. Female: tegmen 7.20 mm long.

Length of frons c. 3 times width at apex, c. twice width at base; ocelli distinct; clypeus c. as long as frons; rostrum terminating at level of mid-coxae. Pronotal width 7 times mid-dorsal length, fronto-lateral carinae very prominent; tegula not carinate.

Head unmarked. Fronto-lateral surfaces of pronotum basally reddish; abdomen with a small dark brown spot on either side of mid-dorsal line. Tegmen and wing whitish hyaline, veins yellow, cross-veins and forks of veins dark brown; posterior margin irregularly dark brown. Tegmen with branches of cubital vein and two basal branches of medial vein each with at least one small black tubercule at *c*. midlength; medial vein with apical forks blackish brown; branches of apical vein each with a small, circular, dark brown spot subapically; posterior branch of radial vein similarly marked; apical cells of radial and medial veins each with an irregular brownish spot medially at two-thirds length; area between radial vein and costal margin irregularly mottled brownish, these markings extending posteriorly over first forks of medial and cubital veins; clavus with a brown spot adjacent to point of fusion of anal veins, another smaller spot subapically. Wing with radial and medial branches each bearing a small black tubercule; medial vein basad of medial-cubital cross-vein with two to four similar tubercules; cubital vein with two tubercules between first and second forks, third branch occasionally with a single tubercule subbasally; a large, irregular, brownish spot between first branch of cubital vein and claval suture somewhat distad of base of former; an irregular, oblique, smoky brown band over radial and medial areas at five-sixths length.

Shaft of aedeagus bearing a pair of large, apically rounded, flap-like processes laterally, and a single, slender, curving, spine-like process medially; ventral surface with a pair of long, closely opposed, flap-like processes subapically. Paramere slender basally, broadly expanded towards regularly rounded apex; dorsal process situated at approximately three-quarters length, very weakly produced postero-dorsally; dorsal surface at one-quarter length with a large, posteriorly directed, hook-like secondary process; ventral surface subbasally with a group of long, robust spines.

MATERIAL EXAMINED

Holotype \mathcal{O}^{1} , **Brazil**: Rondonia, Porto Vello, 22.ii.1979 (*Campbell*) (INPA). Paratypes. **Brazil**: 1 \mathcal{Q} , same data as holotype (BMNH). **Panama**: 1 \mathcal{O}^{1} , Tocumen (USNM).

AMYSIDIELLA gen. n.

Type-species: Amysidiella micare sp. n.

Width of head in dorsal aspect half to three-quarters greater than length. Vertex extending for less than one-quarter its length beyond anterior margins of eyes; lateral margins elevated, gradually converging from base; basal margin transverse, very weakly concave; junction with frons broadly and regularly rounded. Length of frons c. 5 times width at apex, less than twice width at base; lateral margins gradually diverging from apex to level of ocelli, then strongly diverging to base. Genae extending anterior to eyes for less than one-third horizontal diameter of eye. Second antennal segment club-shaped, not longer than twice maximum width; flagellum arising subapically. Ocelli distinct, not prominent. Clypeus, short, broad, rounded; length c. equal to that of frons, 1.5 times width at base; lacking medial and lateral carinae. Rostrum not extending beyond hind-coxae.

Pronotal width 11-14 times mid-dorsal length; fronto-lateral surfaces each with a weak carina extending horizontally from adjacent to eye to lateral margin. Tegula not carinate. Disc of mesonotum c. as wide as long; medial carina weak or obsolete; lateral carinae absent.

Length of tegmen 5.90-7.20 mm, slightly less than 3 times maximum width. Medial vein separating from fused radial and subcostal veins at c. one-sixth length; with seven branches extending to post-apical margin. Radial and subcostal veins fused over c. basal one-third length; radial with two branches extending to apical margin, linked to medial by cross-veins at slightly distad of second fork of the latter, and to subcostal subapically. Cubital vein with four branches extending to posterior margin; first and second, and third and fourth linked by cross-veins.

Length of wing slightly greater than half that of tegmen; apex acutely rounded. Cubital vein with three branches extending to posterior margin, linked by a cross-vein to medial at level of second fork. Medial vein two-branched; linked to unbranched radial vein by a cross-vein at *c*. two-thirds length.

Head and body yellowish. Frons and genae at level of eyes reddish. Fronto-lateral surfaces of pronotum and ventro-lateral surfaces of mesonotum each with a distinct horizontal reddish band. Tegmen and wing

faintly whitish hyaline, veins pale, lacking prominent pigmentation. Tegmen with a brownish spot adjacent to costal margin subbasally; another darker irregular marking extending anteriorly from claval margin at c. one-third length. Wing either unmarked, or with a very faint, irregular transverse band.

Male genitalia with shaft of aedeagus horizontal, symmetrical, subapically expanded, robust in lateral aspect; dorsal and lateral surfaces with prominent spine-like processes; ventral surfaces unarmed. Paramere with dorsal process reduced to a small, posteriorly directed, hook-like projection subapically. Posterior margin of subgenital plate transverse. Anal tube strongly produced posteriorly, postero-lateral angles expanded.

Female with posterior margin of subgenital plate regularly produced, apically truncate.

Amysidiella is distinguished by a combination of the proportions of the head, pronotum, tegmen and wing, and by the structure of the male genitalia, consisting of a very heavily armed aedeagus with a paramere in which the dorsal process is almost obsolete. Recorded from Brazil and Guyana.

Key to species of Amysidiella

- 1 Pronotum with maximum width in excess of 13 times length at mid-dorsal line. Aedeagus with
- lateral spines short, arising basad of mid-length (Fig. 164)..... micare sp. n. (p. 102) Pronotum with maximum width less than 12 times length at mid-dorsal line. Aedeagus with lateral spines very long, arising distad of mid-length (Fig. 163) pseudomicare sp. n. (p. 102)

Amysidiella micare sp. n.

(Figs 4, 22, 25, 164, 167, 171)

Male: head 0.40 mm long, 0.69 mm wide; pronotum 1.18 mm wide; tegmen 5.95-6.12 mm long; wing 3.40 mm long. Female: tegmen 7.14 mm long.

Length of frons 5.5 times width at apex, 1.5 times width at base; ocelli small, distinct; clypeus as long as frons. Pronotal width 14 times mid-dorsal length.

Frons with a scarlet spot at level of eyes, often extending onto adjacent surfaces of genae. Fronto-lateral surfaces of pronotum each with a narrow scarlet band extending horizontally from level of ventral margin of eye to lateral margin; male with apices of posterior lobes of anal tube dark brown/black. Tegmen with a pale brownish spot between costal margin and point of separation of radial and subcostal veins; another larger, irregular marking at approximately one-third length extending from costal margin over first fork of cubital vein; an irregular band extending from apex of clavus to second branch of cubital vein. Wing with a very weak transverse band at level of medial-cubital cross-vein.

Shaft of aedeagus broadly expanded over apical one-half length; lateral surfaces subapically each with a large, flap-like process terminating apically in a curving spine; dorsal surface at three-quarters length with a pair of small, curving, spines at midline, and laterally at rather over midlength, with a pair of long, slender, curving, spine-like processes. Paramere slender; dorsal process situated at three-fifths length, greatly reduced, consisting of a single, short, posteriorly directed, hooked spine; dorsal surface subbasally with a flap-like process bearing numerous long, robust spines.

MATERIAL EXAMINED

Holotype O, Brazil: Belem, Para, v:1924 (Williams) (BMNH).

Paratypes. Brazil: 2 , 1 2, same data as holotype (BMNH). Guyana: 4 , Blairmont (BMNH).

This species is readily distinguished by its pigmentation, especially the dark posterior lobes of the anal tube in the male, and by the reduced armature of the paramere.

Amysidiella pseudomicare sp. n.

(Figs 163, 168, 172)

Male: head 0.44 mm long, head 0.67 mm wide; pronotum 1.10 mm wide; tegmen 6.00 mm long; wing 3.35 mm long. Female: tegmen 6.60 mm long.

Length of frons c. 5 times width at apex, one and two-thirds width at base; ocelli large, not prominent; clypeus as long as frons. Pronotal width 11 times mid-dorsal length.

Frons pale crimson at level of eyes; fronto-lateral surfaces of pronotum each with a narrow, pale crimson band extending horizontally from adjacent to midline of eye to lateral margin; mesonotum with a similar band dorsad of bases of mid coxae. Tegmen with a small, distinct, brownish spot on costal margin at level of

point of separation of medial and fused radial-subcostal veins; a distinct, irregular, transverse, brownish band extending from costal margin over radial and medial veins at one-third length and terminating at base of third branch of cubital vein; an irregular, pale brownish spot extending from first-second cubital cross-vein to claval margin. Wing usually unmarked; occasionally with an indistinct, pale brownish, transverse band at midlength.

Shaft of aedeagus robust, strongly laterally expanded over apical one-third length; dorsal surface subapically with a pair of short, spine-like processes, a pair of long, slender, curving, processes; lateral surfaces subapically each with a large, dorsally directed, flap-like process, and a very long, slender, spine-like, horizontal process. Paramere very slender; apex acutely rounded; dorsal process situated slightly basad of three-quarters length, reduced to a small, posteriorly directed hook with a low, rounded projection distally; dorsal surface subapically with a large, rounded, secondary process bearing numerous long, robust, spines.

MATERIAL EXAMINED

Holotype \mathcal{O} , **Brazil**: Rio Uapes, 5.iii (*Roman*) (NR). Paratype. 1 \mathcal{Q} , same data as holotype (BMNH).

This species, though closely related to *micare*, may be distinguished by the greater lateral expansion and the length, position and inclination of the spines of the aedeagus.

PARAMYSIDIA gen. n.

Type-species: Mysidia mississippiensis Dozier, by present designation.

Head in dorsal aspect as wide as or up to one-third wider than long. Vertex extending beyond anterior margins of eyes for from one-third to one-half its length; lateral margins gradually converging from base to level of anterior margins of eyes, thence subparallel to apex; lateral carinae very prominent, almost foliaceous apically; basal margin shallowly concave; junction with frons broadly and regularly rounded. Frons c. 4–6 times as long as wide at apex, c. twice width at base; lateral margins subparallel from apex to level of ocelli, then gradually diverging to base, or very gradually and regularly diverging from apex and abruptly curving outwards subbasally. Genae extending beyond eyes for two-fifths to one-half horizontal diameter of eye. Antenna short; second segment club-shaped, c. twice as long as broad; apex weakly stepped; flagellum arising subapically. Ocelli commonly large, distinct; rarely prominent. Clypeus short, broadly rounded; length c. equal to that of frons, twice width at base; medial carina generally obsolete or absent; lateral carinae obsolete, or only distinct subbasally. Rostrum usually terminating immediately posterior to hind coxae, rarely extending to midlength of abdomen.

Pronotal width from 10–13 times mid-dorsal length; fronto-lateral surfaces each with a prominent carina curving horizontally from adjacent to eye to lateral margin. Tegula not carinate, or with carina obsolete. Disc of mesonotum slightly wider than long; medial carina often weak or obsolete, rarely distinct and percurrent; lateral carinae usually absent, rarely distinct.

Tegmen commonly from $5 \cdot 00-6 \cdot 50$ mm long, rarely exceeding $7 \cdot 00$ mm long. Medial vein distinct from near base, with seven branches extending to posterior and apical margins, second branch linked to third, and fourth to fifth by cross-veins. Fused radial and subcostal veins separating at *c*. midlength; radial with two branches extending to apical margin, linked to medial by a single cross-vein at two-thirds length. Cubital vein with four branches extending to posterior margin; first and second, and third and fourth linked by cross-veins.

Length of wing from three-fifths to three-quarters that of tegmen. Subcostal and radial veins fused over basal one-third length, unbranched. Radial vein linked to second fork of medial vein by a single cross-vein at two-thirds length. Medial vein with two branches extending to apical margin, linked to cubital vein by a cross-vein at two-thirds length. Cubital vein with three branches.

Head and body predominantly yellowish brown, often very pale; genae adjacent to ocelli often tinged reddish; pronotum with fronto-lateral surfaces often deep yellow over carinae; dorsal surface of abdomen rarely red or dark brown. Tegmen and wing whitish hyaline; veins yellowish or dark brown; cross-veins and forks of veins usually dark brown; veins and cross-veins often edged smoky brown, giving a mottled appearance. Tegmen rarely with an irregular, smoky brown, transverse band. Wing commonly with two weak, very irregular, smoky brown, transverse bands; posterior and apical margins often broadly pale brown.

Male genitalia with shaft of aedeagus slender, horizontal, cylindrical, somewhat laterally expanded subapically; dorsal surface subapically with a pair of very asymmetrical, dorsally directed, longitudinally aligned processes, of which that on the right is flap-like, that on the left commonly slender and spine-like; dorsal surface at *c*. midlength with a single, usually slender, dorsally directed, apically bifid secondary

apodeme medially; lateral margins often each with an antero-laterally directed apically bifd process at *c*. midlength; ventral surface unarmed. Paramere commonly with apex broadly rounded; dorsal process situated subapically, greatly reduced; dorsal surface subbasally with a small hook-like secondary process; rarely with apex acute or dorsal process robust. Anal tube not greatly extended, apex commonly notched medially.

Female with posterior margin of subgenital plate frequently produced medially.

Paramysidia differs from *Mysidia* as follows: the armature of the aedeagus is strongly asymmetrical and includes a prominent process at midlength on the mid-dorsal line; the development of the dorsal process of the paramere is usually strongly reduced, its function possibly being, at least partially, taken over by the hook-like secondary process.

Distributed from the U.S.A. (Mississippi, Florida, Texas, Louisiana) to Costa Rica, Honduras, El Salvador, Panama, Brazil and Peru. From this distribution it would appear that species of the genus probably reached the U.S.A. via Central America, though it has not been recorded from Mexico. This shows a marked contrast with *Dysimia*, which almost certainly found its way into North America by island-hopping across the Caribbean.

Key to species of Paramysidia (based on external characters)

Due to the extreme external similarity of many species, reference should be made, where possible, to the structure of the male genitalia.

| 1 | Tegmen with cross-veins and forks of veins not distinctly margined smok eastern U.S.A | |
|------|--|----------------------------|
| _ | Tegmen with cross-veins and forks of veins broadly margined smoky brown. | |
| 2(1) | Tegmen with veins vellowish or pale brown | |
| _ | Tegmen with veins dark brown | |
| 3(2) | Clypeus with length less than that of frons; genae often tinged orange; front | o-lateral surfaces · |
| | of pronotum with carinae orange. Peru | |
| - | Clypeus with length equal to that of frons; head and body unmarked. Brazil . | |
| 4(2) | Clypeus with length not greater than that of frons; frons with length less than | n 5 times width at |
| | apex | |
| - | Clypeus with length one-third greater than that of frons; frons with length | |
| | width at apex. Honduras, Costa Rica, El Salvador | 1 11 / |
| 5(4) | Width of pronotum 11 times length at mid-dorsal line | |
| - | Width of pronotum greater than 13 times length at mid-dorsal line. Panama | |
| 6(5) | Rostrum extending to mid-length of abdomen. Costa Rica | tessellata sp. n. (p. 107) |
| - | Rostrum terminating immediately posterior to hind coxae. Costa Rica, Pana | |
| | nigropu | nctata (Metcalf) (p. 105) |

Key to species of Paramysidia (based on male genitalia)

| 1 | Paramere with dorsal process strongly reduced |
|------|--|
| - | Paramere with dorsal process very robust (Fig. 147) vulgaris sp. n. (p. 106) |
| 2(1) | Paramere with apex broadly rounded |
| - | Paramere with apex acutely rounded (Fig. 148) felix sp. n. (p. 106) |
| 3(2) | Aedeagus with lateral processes |
| -`` | Aedeagus lacking lateral processes (Fig. 135)nigropunctata (Metcalf) (p. 105) |
| 4(3) | Aedeagus with right dorsal process slender, distinctly longer than broad |
| - | Aedeagus with right dorsal process massive, as long as broad (Fig. 143) |
| | mississippiensis (Dozier) (p. 105) |
| 5(4) | Aedeagus with right dorsal process distinctly longer than left dorsal process |
| - | Aedeagus with right dorsal process very short, shorter than left dorsal process (Fig. 144) |
| | boudica sp. n. (p. 107) |
| 6(5) | Paramere with secondary dorsal process apically acute (Fig. 152); aedeagus with right dorsal |
| | process apically acute (Fig. 145) tessellata sp. n. (p. 107) |
| - | Paramere with secondary dorsal process apically serrate (Fig. 153); aedeagus with right |
| | dorsal process apically rounded (Fig. 146) barbara sp. n. (p. 106) |

Paramysidia mississippiensis (Dozier) comb. n.

(Figs 20, 27, 136, 143, 150)

Mysidia mississippiensis Dozier, 1922: 82. Holotype Q, U.S.A. (USNM) [examined].

Male: head 0.52 mm long; 0.69 mm wide; pronotum 1.56 mm wide; tegmen 6.00-7.50 mm long; wing 4.42 mm long. Female: tegmen 6.80-7.30 mm long.

Length of frons 4 times width at apex, twice width at base; ocelli large, not prominent; clypeus as long as frons. Pronotal width 11 times mid-dorsal length; tegula weakly carinate.

Genae adjacent to ocelli often with an orange or dull reddish circular spot; fronto-lateral surfaces of pronotum with carinae broadly deep yellow. Tegmen and wings with veins yellowish brown; cross-veins and branches of veins dark brown. Tegmen with cross-veins each surrounded by a roughly circular smoky brown spot; posterior margin narrowly smoky brown; basal three-eighths of length, and costal and radial cells, mottled smoky brown; area between first branch of cubital vein and apex of clavus broadly smoky brown. Wing with area distad of radial-medial cross-vein irregularly mottled smoky brown.

Shaft of aedeagus basally slender, broadly laterally expanded over apical half length; dorsal surface at three-quarters length with a pair of large processes, that on the right of midline massive, hooked, anteriorly directed; lateral processes present, apically bifid; dorsal apodeme situated at three-fifths length, slender, weakly curving. Paramere slender at base, becoming greatly expanded towards obtusely rounded apex; dorsal process situated at rather over two-fifths length, slender, apex posteriorly produced.

MATERIAL EXAMINED

Holotype Q, U.S.A.: Mississippi, Leland, 15.ix.1921 (Drake) (USNM).

U.S.A.: 4 \mathcal{O} , 4 \mathcal{Q} , Mississippi (FAMU; BMNH); 6 \mathcal{O} , 4 \mathcal{Q} , Louisiana (FAMU; BMNH); 2 \mathcal{O} , Texas (FAMU; USNM); 2 \mathcal{O} , Florida (USNM).

This species is most readily distinguished by the pigmentation of the tegmen and wing, and by the structure of the male genitalia.

Paramysidia nigropunctata (Metcalf) comb. n.

(Figs 135, 142, 149)

Mysidia nigropunctata Metcalf, 1938: 316. Holotype Q, PANAMA (MCZ) [examined].

Male: head $0.52 \text{ mm} \log_{10} 0.61 \text{ mm}$ wide; pronotum 1.40 mm wide; tegmen $5.60-6.30 \text{ mm} \log_{10}$; wing $3.55 \text{ mm} \log_{10}$. Female: tegmen $6.60 \text{ mm} \log_{10}$.

Length of frons 4 times width at apex, 2-5 times width at base; ocelli large, prominent; clypeus c. as long as frons. Pronotal width 11 times mid-dorsal length.

Genae around ocelli occasionally pale orange; abdomen with dorsal surface usually dark brown. Tegmen and wing with veins and cross-veins dark brown, broadly and irregularly edged brownish. Wing with an obscure, irregular, smoky brown, transverse band over radial-medial cross-vein; another much narrower band over first fork of cubital vein; posterior and apical margins irregularly edged smoky brown.

Shaft of aedeagus somewhat laterally expanded at two-thirds length; dorsal surface with a broad hook-like process on the right side, and a slender spine-like process on the left; ventro-lateral surfaces unarmed; mid-dorsal process slender, curving, situated at midlength. Paramere robust; apex broadly rounded; dorsal process simple, situated at three-quarters length.

MATERIAL EXAMINED

Holotype Q, Panama: C.Z., Barro Colorado, 13.vii.1924 (Banks) (MCZ).

Panama: 7 σ , 6 φ (including 2 σ , 1 φ paratypes) (BMNH; FAMU; CAS; MCZ). **Costa Rica**: 7 σ , 5 φ (BMNH; FAMU; USNM). **Nicaragua**: 1 φ (USNM).

In his description Metcalf refers to the holotype as female; however, a male specimen bears the MCZ 'type' label, while the female is labelled as 'allotype'.

In external characters this species resembles *boudica*, but it is readily distinguished by the structure of the male genitalia.

Paramysidia vulgaris sp. n.

(Figs 2, 133, 140, 147)

Male: head 0.46 mm long, 0.59 mm wide; pronotum 1.20 mm wide; tegmen 5.00-6.00 mm long; wing 3.00 mm long. Female: tegmen 6.00-7.25 mm long.

Length of frons c. 5 times width at apex, c. twice width at base; ocelli large, distinct; clypeus slightly shorter than frons. Pronotal width c. 12 times mid-dorsal length.

Genae often orange around ocelli; second antennal segment rarely black apically; fronto-lateral carinae narrowly orange. Tegmen with radial and medial veins pale, other veins and cross-veins brown; cross-veins and forks of veins broadly edged smoky brown to give an irregular mottled appearance; without distinct transverse bands; apical branches of medial vein dark brown at midlength. Wing with veins alternately pale and dark; with a broad, smoky brown, transverse band at midlength, another slightly distad of three-quarters length.

Shaft of aedeagus slender basally, broader from midlength; dorsal surface subapically with a large, apically acute, flap-like process on the right side and a long, slender, acute, spine-like process on the left; lateral surfaces each with a weakly bifurcate process; mid-dorsal process situated at midlength, slender, curving antero-dorsally. Paramere robust; apex obtusely rounded; dorsal process large, situated somewhat distad of midlength, not posteriorly produced.

MATERIAL EXAMINED

Holotype O', Brazil: Para, Jabaty, v.1924 (Williams) (BMNH).

Paratypes. **Brazil**: $8 \circ$, $8 \circ$, same data as holotype; Mato Grosso; Bahia Iguassu (BMNH; NR). **Peru**: 63 \circ , 64 \circ , Ivitas, 60 km W. of Pucallpa (BMNH; FAMU).

The structure of the paramere of this species is unique and readily separates it from all others in the genus.

Paramysidia felix sp. n.

(Figs 134, 141, 148)

Male: head $0.46 \text{ mm} \log, 0.61 \text{ mm} \text{ wide}$; pronotum 1.30 mm wide; tegmen $5.30 \text{ mm} \log$; wing $3.06 \text{ mm} \log$. Female unknown.

Length of frons c. 6 times width at apex, c. twice width at base; ocelli large, not prominent; clypeus as long as frons. Pronotal width c. 10 times mid-dorsal length.

Head and body unmarked. Tegmen and wing with veins and cross-veins pale yellow, broadly and irregularly edged pale brown. Tegmen with markings coalescing to form a broad, indistinct, transverse band over first fork of cubital vein; narrower, very broken, bands at midlength and three-quarters length. Wing with a narrow, pale brownish, transverse band slightly basad of midlength; another broader band over radial-medial cross-vein; posterior and apical margins very faintly and irregularly tinged smoky brown.

Shaft of aedeagus slender, not laterally expanded; dorsal surface with a pair of large flap-like processes, each terminating anteriorly in a long slender spine; lateral surfaces at three-fifths length each with a broad apically bifid process; mid-dorsal process situated at three-fifths length, very broad in lateral aspect, curving, with a large acute spine on posterior surface at midlength. Paramere slender; apex narrowly rounded; dorsal process robust, situated somewhat distad of midlength, posteriorly produced.

MATERIAL EXAMINED

Holotype O', **Brazil**: Jabaty, Para, v.1924 (*Williams*) (BMNH). Paratype. 1 O', same data as holotype (BMNH).

This species is distinguished by its very pale pigmentation, and by the structure of the male genitalia. It is regarded as having the least specialized genitalia in the genus; the shaft of the aedeagus is almost symmetrical, but the presence of the mid-dorsal process confirms its placement; the paramere bears a subbasal, hook-like, secondary process.

Paramysidia barbara sp. n.

(Figs 139, 146, 153)

Male: head 0.42 mm long, 0.42 mm wide; pronotum 1.03 mm wide; tegmen 5.60–6.40 mm long; wing 3.15 mm long. Female: tegmen 6.40–6.90 mm long.

TAXONOMY OF NEOTROPICAL DERBIDAE IN THE NEW TRIBE MYSIDIINI (HOMOPTERA) 107

Length of frons c. 6 times width at apex, c. twice width at base; ocelli large, not prominent; clypeus one-third longer than frons. Pronotal width 12 times mid-dorsal length.

Head and body unmarked. Tegmen and wing hyaline; veins and cross-veins dark brown, narrowly and irregularly edged smoky brown. Tegmen with subcostal, radial, medial and cubital areas irregularly mottled smoky brown; posterior margin narrowly smoky brown. Wing with an indistinct, irregular, smoky brown, transverse band immediately distad of radial-medial cross-vein.

Shaft of aedeagus with a large, slightly hooked, flap-like process to the right of mid-dorsal line, and a long, slender, slightly curving, spine-like process to the left; mid-dorsal process situated at two-thirds length, curving, strongly bifurcate apically; lateral surfaces each with a short apically shallowly bifurcate process. Paramere robust; apex very obtusely rounded; dorsal process situated subapically, obsolete.

MATERIAL EXAMINED

Holotype O, Honduras: Santa Barbara, Chumbagua, 26.vii.1966 (Matta) (FAMU).

Paratypes. Honduras: $7 \circ, 7 \circ$, same data as holotype (FAMU; BMNH). Costa Rica: $1 \circ$, Villa Neilly (FAMU). El Salvador: $2 \circ, 4 \circ$, San Miguel; San Pedro Perulapan (FAMU; BMNH).

This species is distinguished by the very narrow head, and by the structure of the male genitalia.

Paramysidia boudica sp. n.

(Figs 137, 144, 151)

Male: head 0.48 mm long, 0.67 mm wide; pronotum 1.40 mm wide; tegmen 6.40 mm long; wing 3.60 mm long. Female unknown.

Length of frons 4.5 times width at apex, 2.5 times width at base; ocelli large, distinct; clypeus slightly shorter than frons. Pronotal width c. 13 times mid-dorsal length.

Genae around ocelli and anterior to bases of antennae tinged pale orange. Fronto-lateral surfaces of pronotum with carinae narrowly edged pale orange. Tegmen and wing with veins and cross-veins dark brown, broadly and irregularly edged smoky brown. Tegmen with base narrowly smoky brown. Wing with an irregular, broad, smoky brown band extending transversely from costal margin to apex of clavus at level of first fork of cubital vein; another, very broad band at level of radial-medial cross-vein; posterior and apical margins broadly smoky brown.

Shaft of aedeagus slender; dorsal process to right of midline broad, tapering, hook-like; ventro-lateral surfaces each with an apically bifid, spine-like process at midlength; dorsal apodeme situated slightly dorsad of midlength, sinuate, very slender. Paramere very robust; apex very obtusely rounded; dorsal process situated subapically, strongly reduced; secondary dorsal process situated at approximately one-third length, small, hook-like.

MATERIAL EXAMINED

Holotype O, Panama: 1924 (Cheeseman) (BMNH).

This species is readily distinguished by the markings of the tegmen and wing, and by the structure of the male genitalia.

Paramysidia tessellata sp. n.

(Figs 138, 145, 152)

Male: head 0.46 mm long, 0.57 mm wide; pronotum 1.36 mm wide; tegmen 6.00–6.80 mm long; wing 3.65 mm long. Female unknown.

Length of frons 4 times width at apex, c. twice width at base; ocelli large, distinct; clypeus as long as frons. Pronotal width 11 times mid-dorsal length.

Genae often tinged deep yellow around ocelli. Fronto-lateral surfaces of pronotum with carinae broadly deep yellow; abdomen with dorsal surface usually tinged red or brown. Tegmen and wing with veins and cross-veins dark brown, broadly and very irregularly edged smoky brown. Wing with a very faint smoky hyaline transverse band at one-third length, a much more distinct smoky brown band at level of first fork of cubital vein, a third band at level of radial-medial cross-vein; posterior and apical margins irregularly edged smoky brown.

Shaft of aedeagus broad, strongly laterally expanded from midlength to apex; dorsal surface at three-quarters length with right-hand process very robust and hook-like; lateral surfaces each with an apically bifurcate, spine-like process at midlength; dorsal apodeme situated slightly basad of midlength, slender, slightly curving. Paramere robust; apex broadly expanded; dorsal process simple, situated at three-quarters length.

Holotype O^{*}, Costa Rica: Guan, 3 km NW. Liberia, 500 ft, 12.vii.1974 (O'Brien & Marshall) (FAMU). Paratypes. 8 O^{*}, data as holotype (FAMU; BMNH).

This species is distinguished by the three transverse bands on the wing, the pigmentation of the abdomen, and by the structure of the male genitalia.

SYMIDIA Muir

Symidia Muir, 1918: 234. Type-species: Symidia flava Muir, by monotypy.

Head in dorsal aspect distinctly wider than long. Vertex triangular, extending for one-quarter to one-third its length beyond anterior margins of eyes, lateral carinae very prominent; posterior margin very broadly and deeply incised; junction with frons commonly broadly rounded, rarely acutely angled. Frons extremely narrow, length 18–20 times width at apex, 2–3 times width at base; c. parallel-sided from apex to immediately above base, then very abruptly laterally expanded. Genae extending anterior to eyes for one-third to two-fifths horizontal diameter of eye. Second antennal segment club-shaped, c. as long as wide; apex truncate, flagellum arising apically. Ocelli very small, usually distinct. Clypeus c. as long as frons; medial carina usually distinct over greater part of length from base; lateral carinae usually percurrent. Rostrum extending at least to base of subgenital plate.

Pronotal width 8–16 times mid-dorsal length; fronto-lateral surfaces each with a very highly elevated, foliaceous carina curving horizontally from adjacent to midline of eye to lateral margin, continuing ventrally and internally along lateral and ventral margins to genae at level of base of antenna (Fennah, 1952, refers to this apparent encirclement of the antennal base as an 'antennal fovea'). Tegula not carinate. Disc of mesonotum slightly broader than long; medial and lateral carinae usually distinct; rarely obscure, extending from anterior margin to midlength or almost to hind margin.

Tegmen 4.90-6.00 mm long. Subcostal and radial veins fused from base over c. one-third length. Radial vein with three branches extending to apical margin. Medial vein separating from fused radial and subcostal veins at one-sixth length; with six branches extending to apical and posterior margins. Cubital vein with two branches extending to posterior margin, linked to medial vein by a cross-vein at c. one-third length (Fig. 5).

Wing not more than c. half length of tegmen, often considerably shorter. Radial, medial and cubital veins distinct throughout. Radial and medial veins unbranched, linked by a cross-vein at slightly distad of two-thirds length. Cubital vein two-branched, linked to medial vein by a cross-vein at two-thirds length.

Head and body predominantly pale brownish yellow; abdomen occasionally darker. Genae often with red or orange markings dorsal or ventral to eyes. Tegmen and wing usually pale whitish hyaline, veins pale; often with pale brownish markings which may coalesce to form irregular and indistinct transverse bands.

Male genitalia with shaft of aedeagus horizontal, cylindrical, variably asymmetrical; dorsal surface subapically with three or four pairs of large, anteriorly directed processes; ventral surface usually unarmed. Paramere with dorsal process situated subapically, usually rounded, never greatly produced, interlocking surfaces situated basally, often reduced; ventral surface subbasally with numerous, very small, obtuse spines, or ridged. Anal tube moderately produced posteriorly, somewhat laterally expanded, apically notched or bifurcate. Subgenital plate with posterior margin transverse, or with a small triangular projection medially.

Female with posterior margin of subgenital plate medially produced, occasionally greatly so.

Symidia is regarded as being a highly developed off-shoot of the Mysidiini because of the reduction of the tegminal and wing venation, the great expansion of the fronto-lateral carinae of the pronotum, the asymmetry of the aedeagus, and the simple form of the dorsal process of the paramere, while still retaining the apical position of the antennal flagellum.

Of the species available for study, *flava* is regarded as the most primitive because of its very extensive range and relatively unspecialized aedeagal development.

The genus is recorded from Trinidad, Guyana, Brazil, Ecuador and Peru.

Key to species of Symidia (based on external characters)

| 1 | Junction of vertex and frons acutely angled in lateral aspect | flava Muir (p. 109) |
|------|--|------------------------|
| - | Junction of vertex and frons broadly and regularly rounded in lateral aspect | 2 |
| 2(1) | Tegmen with oblique transverse bands dark and prominent pinte | osamia sp. n. (p. 109) |
| - ` | Tegmen with oblique transverse bands indistinct | |

- Wing with a very faint, brown, transverse band at one-third length, another much more distinct band at three-quarters length. Genae extending anterior to eyes for only two-fifths horizontal diameter of eye. Female with posterior margin of subgenital plate bearing a small triangular spine medially, not greatly produced posteriorly. Brazil

withycombei sp. n. (p. 110)

Key to species of Symidia (based on male genitalia)

It has not been possible to examine a male of *pintosamia* which is therefore omitted from this key.

| 1 | Shaft of aedeagus with ventral surface unarmed (Fig. 86) pseudoflava sp. n. (p. 110) |
|------|--|
| - | Shaft of aedeagus with ventral surface bearing spine-like processes subapically |
| 2(1) | Paramere with apex obtusely rounded, dorsal process somewhat inclined posteriorly (Fig. |
| | 91) bucaya sp. n. (p. 111) |
| _ | Paramere with apex acutely rounded, dorsal process not posteriorly inclined |
| 3(2) | Shaft of aedeagus with ventral surface bearing a single, anteriorly directed process, situated |
| | to right of midline subapically (Fig. 88) flava Muir (p. 109) |
| _ | Shaft of aedeagus with ventral surface bearing three posteriorly directed spine-like processes |
| | (Fig. 89) withycombei sp. n. (p. 110) |

Symidia flava Muir

(Figs 5, 19, 28, 84, 88, 92)

Symidia flava Muir, 1918: 234. LECTOTYPE O, GUYANA (BMNH), here designated [examined].

Male: head 0.38 mm long, 0.53 mm wide; pronotum 1.05 mm wide; tegmen 5.00-5.30 mm long; wing 2.23 mm long. Female: tegmen 5.10-5.50 mm long.

Junction of vertex and frons acutely angled; length of frons 19 times width at apex, c. 3 times width at base; ocelli very small, obscure; clypeus c. as long as frons; rostrum extending to apex of abdomen. Pronotal width 10 times mid-dorsal length.

Genae each with an orange or red band extending horizontally from adjacent to dorsal margin of eye to junction of vertex and frons. Tegmen and wing whitish hyaline, veins pale yellow. Tegmen with pale, smoky brown markings coalescing to form irregular and intermittent transverse bands at one-third, midand three-quarters length. Wing with very faint, smoky brownish bands at two-fifths and two-thirds length; apex pale smoky brown.

Shaft of aedeagus broad; dorsal surface subapically with three pairs of processes, the second pair flap-like and strongly hooked apically; ventral surface subapically with a single, slender, flap-like process. Paramere slender, apex narrowly rounded; dorsal process situated slightly basad of three-quarters length, low and rounded; ventral surface subbasally with numerous small tooth-like spines.

MATERIAL EXAMINED

Holotype O', Guyana: Demerara R., 20.iii.1913 (Muir) (BMNH).

Guyana: 21 \mathcal{O}^* , 19 \mathcal{Q} (including 4 \mathcal{O}^* , 5 \mathcal{Q} paratypes) (BMNH). **Brazil:** 11 \mathcal{O}^* , 14 \mathcal{Q} (BMNH). **Trinidad:** 9 \mathcal{O}^* , 16 \mathcal{Q} (BMNH). **Ecuador:** 7 \mathcal{O}^* , 4 \mathcal{Q} (BMNH).

This species is readily distinguished by the acutely angled junction of the vertex and frons, and the adjacent markings on the genae.

Symidia pintosamia sp. n.

Female: head 0.44 mm long, 0.55 mm wide; pronotum 1.20 mm wide; tegmen 5.60-6.00 mm long; wing 2.40 mm long. Male unknown.

Junction of vertex and frons broadly rounded; length of frons 20 times width at apex, 3 times width at

base; ocelli very small, distinct; clypeus as long as frons; rostrum extending well beyond apex of abdomen. Pronotal width 11.5 times mid-dorsal length.

Genae ventral to eyes orange; ocelli reddish. Tegmen and wing almost hyaline, veins yellow. Tegmen with a broad, oblique, brown, transverse band at level of separation of fused subcostal and radial veins, another at level of radial-medial cross-vein; apex broadly smoky brown. Wing with a broad, smoky brown, transverse band at four-fifths length.

MATERIAL EXAMINED

Holotype \mathcal{Q} , **Peru**: eastern foothills of Andes, 1 km S. Tingo Maria, 2000 ft, 16.viii.1971 (*Broomfield*) (BMNH).

Paratype. 1 \mathcal{Q} , same data as holotype (BMNH).

This species is distinguished by the prominent dark markings on the tegmen, and by the extreme length of the rostrum.

Symidia pseudoflava sp. n.

(Figs 82, 86, 90)

Male: head 0.40 mm long, 0.50 mm wide; pronotum 1.11 mm wide; tegmen 5.10–5.30 mm long; wing 2.55 mm long. Female: tegmen 5.35–5.95 mm long.

Junction of vertex and frons broadly rounded; length of frons c. 16 times width at apex, 2.33 times width at base; ocelli small, distinct; clypeus as long as frons; rostrum extending to apex of abdomen. Pronotal width 13 times mid-dorsal length.

Genae ventral to eyes scarlet; abdomen often dark brown. Tegmen and wing whitish hyaline, veins very pale. Tegmen with a broad, pale brown, transverse band immediately distad of medial-cubital cross-vein; an ill-defined, oblique, pale brown, transverse band slightly distad of midlength; apical quarter length irregularly mottled pale brownish. Wing with a distinct, pale brown, transverse band at four-fifths length.

Shaft of aedeagus slender; dorsal surface subapically with four pairs of large processes, anterior pair very long and broad, apices hooked; ventral surface unarmed. Paramere with apex very obtusely rounded; dorsal process situated at two-thirds length, large, rounded, with a dorsally aligned, heavily spined ridge on internal surface; ventral surface subbasally with numerous small, tooth-like spines.

MATERIAL EXAMINED

Holotype \mathcal{O} , Ecuador: Tena, 29.iii.1923 (*Williams*) (BMNH). Paratypes. Ecuador: 3 \mathcal{O} , 5 \mathcal{Q} , Tena (BMNH).

This species is distinguished by the scarlet markings on the genae, the pigmentation of the tegmen and wing, and by the structure of the male genitalia.

Symidia withycombei sp. n.

(Figs 85, 89, 93)

Male: head 0.38 mm long, 0.53 mm wide; pronotum 1.18 mm wide; tegmen 5.10 mm long; wing 2.50 mm long. Female: tegmen 5.30–5.70 mm long.

Junction of vertex and frons obtusely rounded; length of frons 18 times width at apex; 3 times width at base; ocelli very small, distinct; clypeus slightly longer than frons; rostrum extending to base of subgenital plate. Pronotal width 14 times mid-dorsal length.

Genae and fronto-lateral surfaces of pronotum pale, ocelli red, genae at level of eyes rarely pale orange. Tegmen and wing whitish hyaline, veins pale yellow. Tegmen broadly and irregularly mottled brownish around cross-veins and forks of veins, these markings coalescing at one-third and two-thirds length to form oblique, intermittent transverse bands. Wing with a distinct, broad, brown, transverse band at threequarters length, a much fainter band at one-third length not extending to posterior margin.

Shaft of aedeagus slender; dorsal surface subapically with four pairs of processes, fourth pair large, flap-like, apically hooked; single, spine-like process partially obscured by the paired processes; ventral surface subapically with a pair of spine-like processes; at some distance basad of apex, a single spine-like process on left side. Paramere slender, apex acute; dorsal process small, situated at three-quarters length, apex truncate and tuberculose.

MATERIAL EXAMINED

Holotype \mathcal{O} , **Brazil**: Rezende, Estado de Rio, ii.1924 (*Williams*) (BMNH). Paratypes. 1 \mathcal{O} , 6 \mathcal{Q} , same data as holotype (BMNH).

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TAXONOMY OF NEOTROPICAL DERBIDAE IN THE NEW TRIBE MYSIDIINI (HOMOPTERA) 111

This species is distinguished by the lack of reddish pigmentation ventral to the eye, the rounded junction of the vertex and frons, and by the structure of the male genitalia.

Symidia bucaya sp. n.

(Figs 83, 87, 91)

Male: head 0.33 mm long, 0.50 mm wide; pronotum 1.05 mm wide; tegmen 4.90–5.10 mm long; wing 2.12 mm long. Female: tegmen 5.40-5.78 mm long.

Junction of vertex and frons obtusely rounded; length of frons 19 times width at apex, 3 times width at base; ocelli very small, distinct; clypeus c. as long as frons; rostrum terminating level with apex of abdomen. Pronotal width 16 times mid-dorsal length.

Genae ventral to eyes, and clypeus brownish yellow; disc of mesonotum and abdomen brownish, the latter occasionally tinged reddish. Tegmen and wing almost hyaline, veins and cross-veins pale yellow. Tegmen with irregular brownish mottlings coalescing to form intermittent, oblique, transverse bands at level of second fork of medial vein and at two-thirds length. Wing with a broad, pale brown, transverse band at two-fifths length, another at two-thirds length.

Shaft of aedeagus subapically bearing four pairs of processes on dorsal surface, fourth pair large, flap-like, apically bifurcate; ventral surface, on the right side only, subapically with a short spine-like process. Paramere with apex obtusely rounded; dorsal process situated at three-quarters length, large, rounded; ventral surface subbasally with numerous small, tooth-like spines.

MATERIAL EXAMINED

Holotype \mathcal{O}^* , **Ecuador**: Bucay, 1000 ft, 7.x.1922 (*Williams*) (BMNH). Paratypes. 6 \mathcal{O}^* , 9 \mathcal{Q} , same data as holotype (BMNH).

This species is distinguished by the absence of reddish pigmentation on the genae, the markings of the tegmen and wing, and by the structure of the male genitalia.

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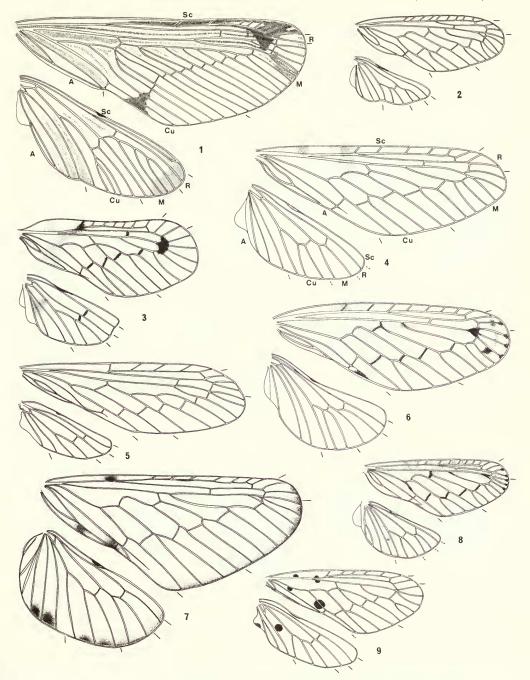
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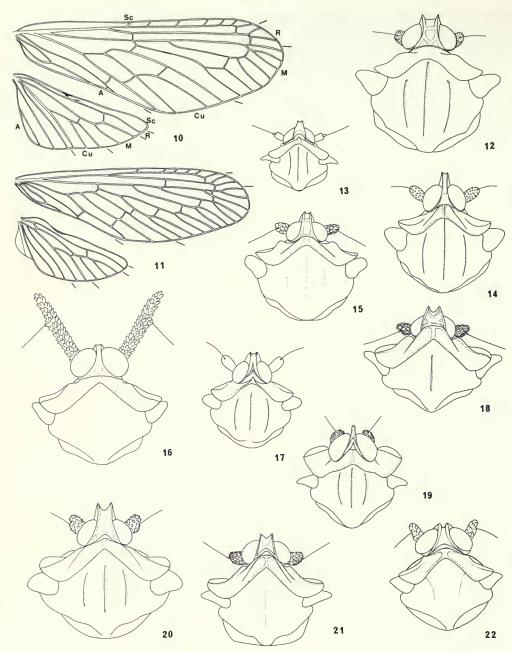
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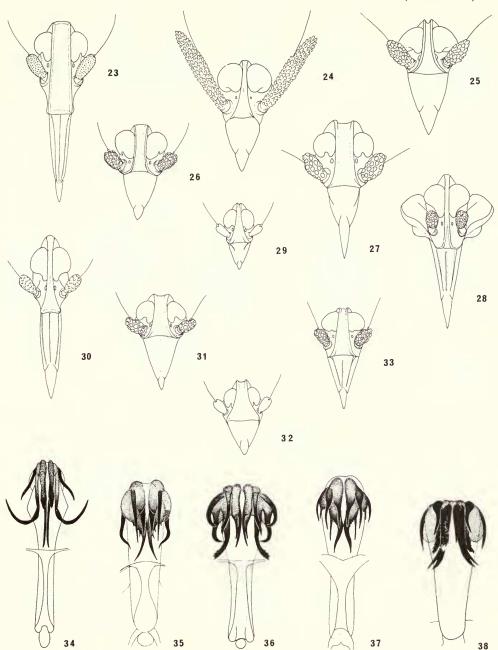
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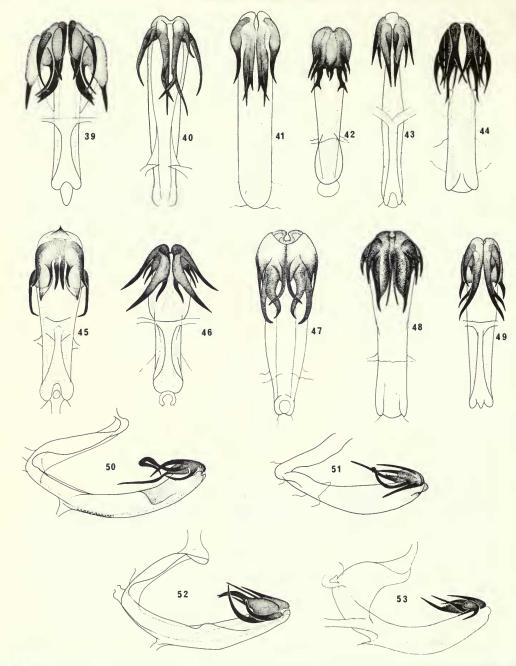
Figs 1-9 The genera of the Derbinae, tegmen and wing: 1, Derbe westwoodi; 2, Paramysidia vulgaris; 3, Dysimiella williamsi; 4, Amysidiella micare; 5, Symidia flava; 6, Neomysidia willisi; 7, Mysidia acidaloides; 8, Ipsemysidia beautifica; 9, Dysimia maculata. Derbe, Paramysidia, Mysidia, and Ipsemysidia are shown to one-half scale. Sc = subcostal area; R = radial area; M = medial area; Cu = cubital area; A = anal area.



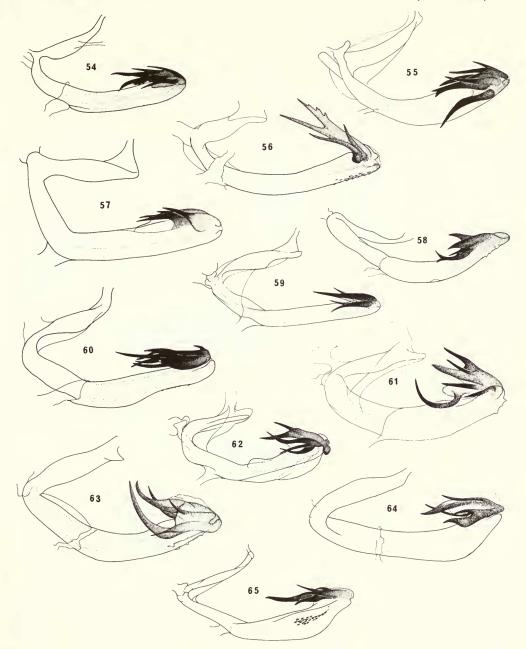
Figs 10-22 The genera of the Derbinae. 10, 11, tegmen and wing of (10) Mysidaloides trinidadensis; (11) Pseudomysidia fuscovaria. 12-22, head, pronotum and mesonotum in dorsal aspect of (12) Derbe westwoodi; (13) Dysimia maculata; (14) Pseudomysidia pallida; (15) Mysidia acidaloides; (16) Mysidaloides trinidadensis; (17) Dysimiella williamsi; (18) Neomysidia willisi; (19) Symidia flava; (20) Paramysidia mississippiensis; (21) Ipsemysidia beautifica; (22) Amysidiella micare. Derbe and Mysidia are shown to one-half scale.



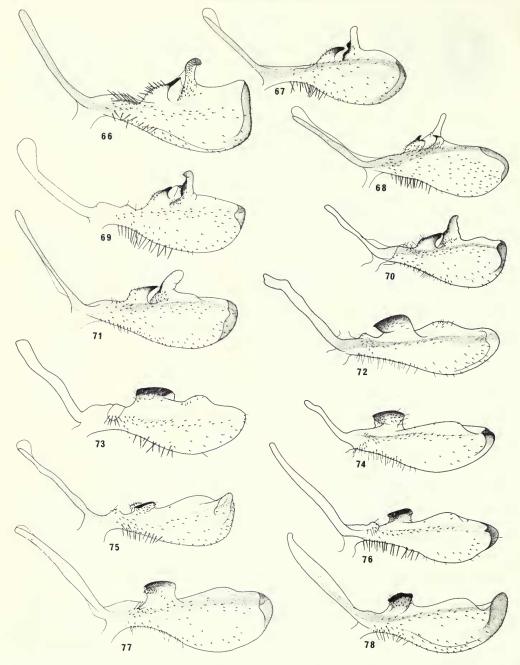
Figs 23–38 The genera of the Derbinae. 23–33, head in frontal aspect of (23) Derbe westwoodi; (24) Mysidaloides trinidadensis; (25) Amysidiella micare; (26) Ipsemysidia beautifica; (27) Paramysidia mississispipiensis; (28) Symidia flava (including fronto-lateral surfaces of pronotum); (29) Dysimia maculata; (30) Pseudomysidia pallida; (31) Neomysidia willisi; (32) Dysimiella williamsi; (33) Mysidia acidaloides. Derbe and Mysidia are shown to one-half scale. Pseudomysidia species. 34–38, dorsal view of aedeagus of (34) palmeri; (35) rubidella; (36) juliana; (37) debora; (38) similis.



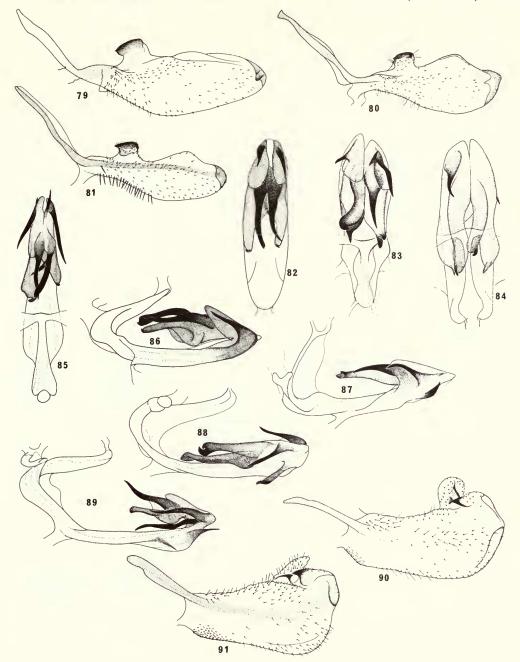
Figs 39–53 Pseudomysidia species. 39–49, dorsal view of aedeagus of (39) hindore; (40) panamensis; (41) fuscovaria; (42) pallida; (43) araguana; (44) marshalli; (45) vestis; (46) trinidadensis; (47) ecuadoriensis; (48) delicata; (49) obnubilia. 50–53, left lateral view of aedeagus of (50) palmeri; (51) rubidella; (52) juliana; (53) debora.



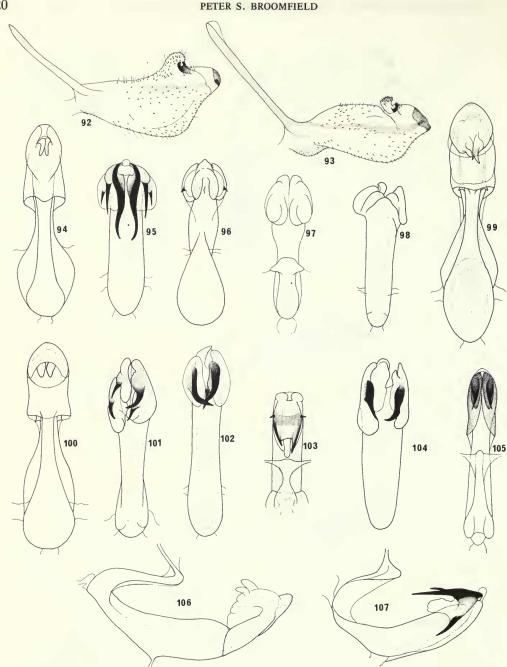
Figs 54-65 Left lateral view of aedeagus of *Pseudomysidia* species. 54, similis; 55, hindore; 56, panamensis; 57, fuscovaria; 58, pallida; 59, araguana; 60, marshalli; 61, vestis; 62, trinidadensis; 63, ecuadoriensis; 64, delicata; 65, obnubilia.



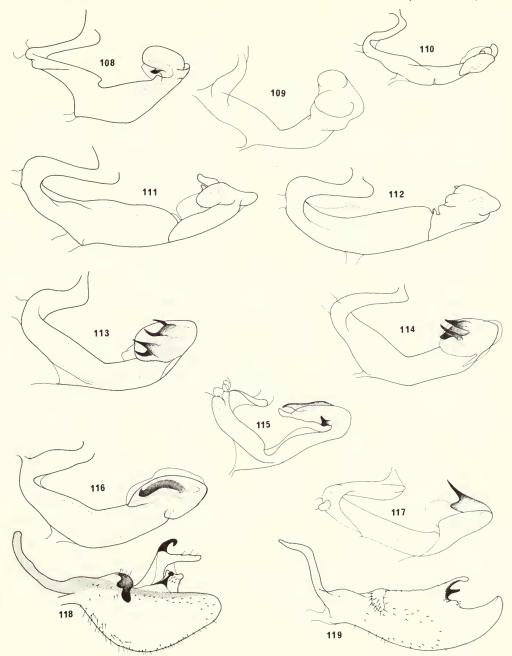
Figs 66–78 Left lateral view of paramere of *Pseudomysidia* species. 66, palmeri; 67, rubidella; 68, juliana; 69, debora; 70, similis; 71, hindore; 72, panamensis; 73, fuscovaria; 74, pallida; 75, araguana; 76, marshalli; 77, vestis; 78, trinidadensis.



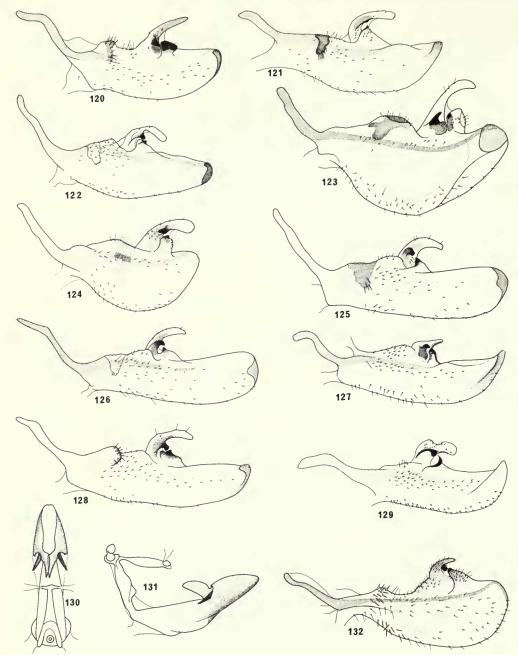
Figs 79–91 Pseudomysidia species. 79–81, left lateral view of paramere of (79) ecuadoriensis; (80) delicata; (81) obnubilia. 82–91. Symidia species. 82–85, dorsal view of aedeagus of (82) pseudoflava; (83) bucaya; (84) flava; (85) withycombei. 86–89, left lateral view of aedeagus of (86) pseudoflava; (87) bucaya; (88) flava; (89) withycombei. 90, 91, left lateral view of paramere of (90) pseudoflava; (91) bucaya.



Figs 92-107 92, 93, Symidia species, left lateral view of paramere of (92) flava; (93) withycombei. 94-107, Dysimia species. 94-105, dorsal view of aedeagus of (94) distincta; (95) numa; (96) maculata; (97) pseudomaculata; (98) muiri; (99) fennahi; (100) telfordi; (101) maculipennis; (102) obrieni; (103) jamaicensis; (104) morrisi; (105) astarte. 106. 107, left lateral view of aedeagus of (106) distincta; (107) numa.



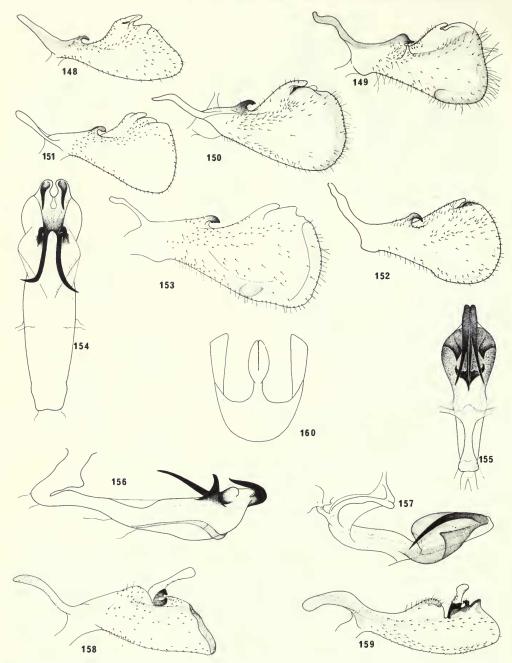
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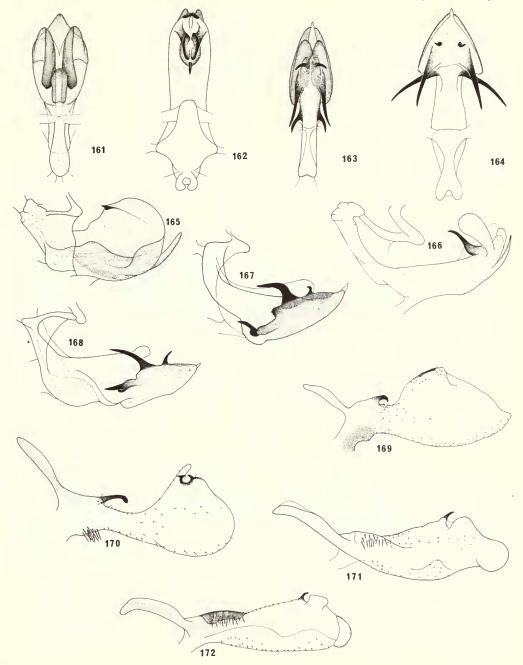
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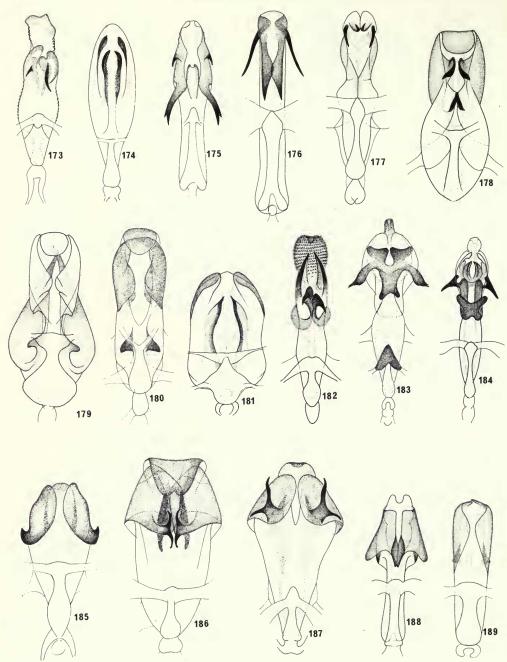
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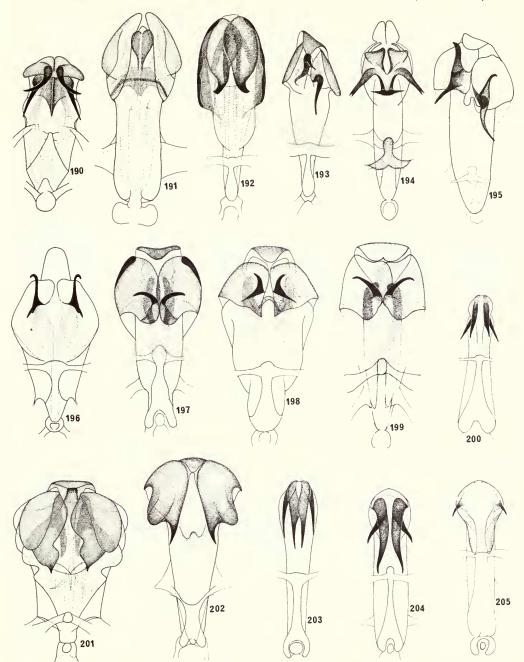
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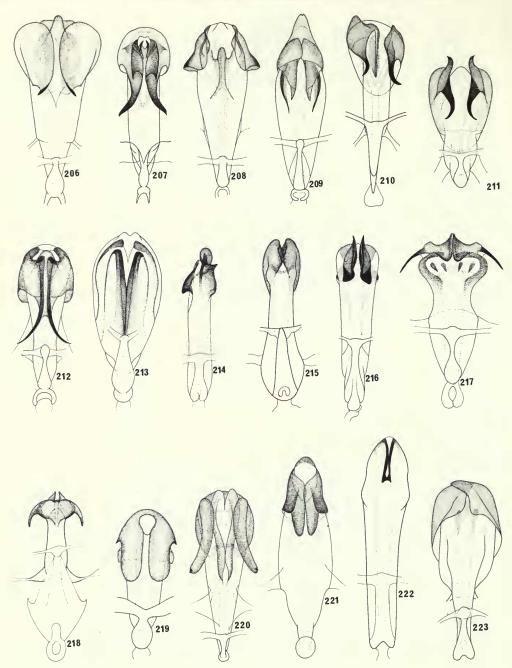
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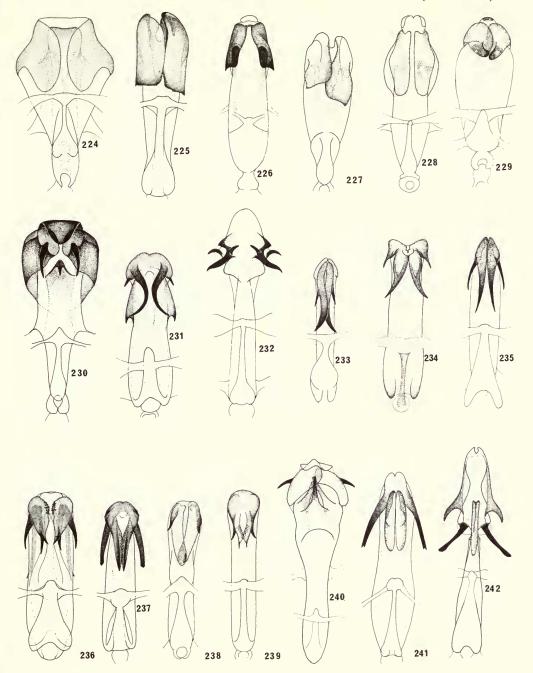


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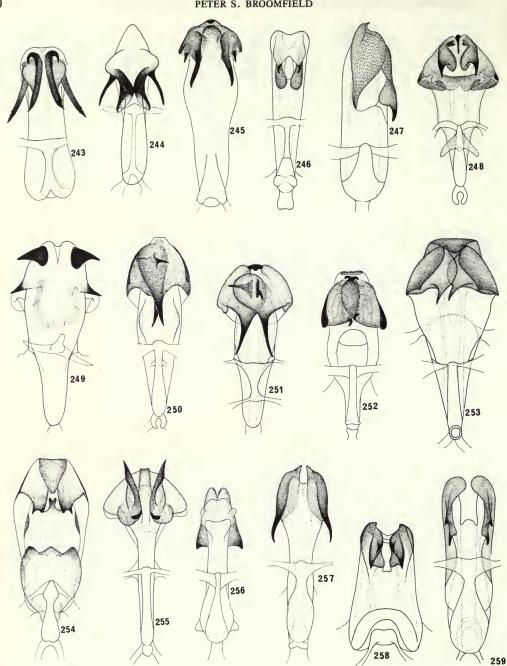


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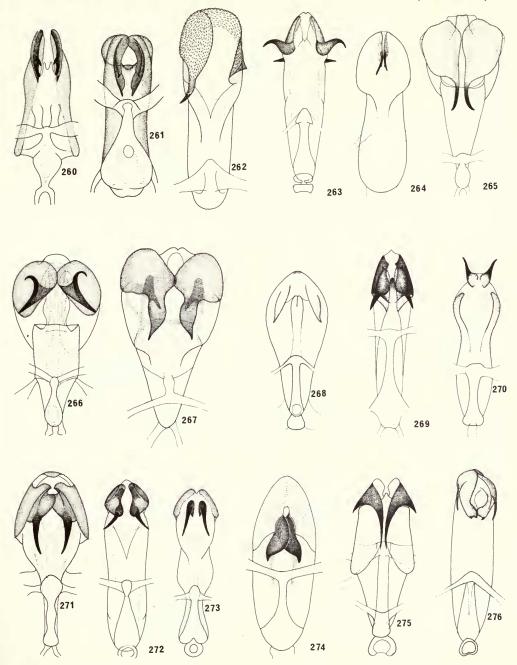
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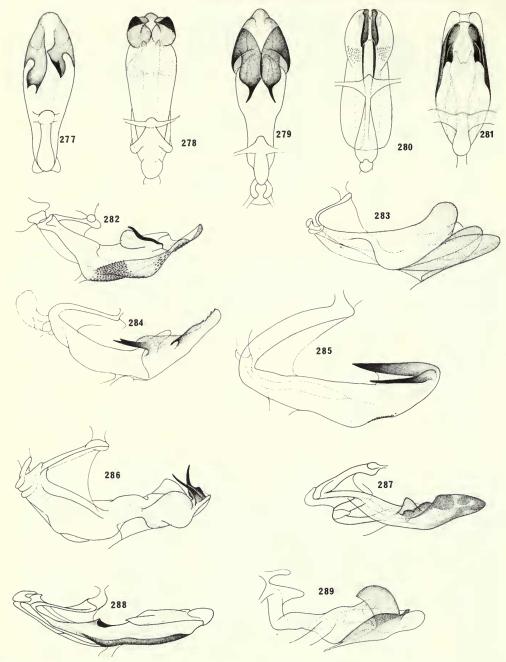
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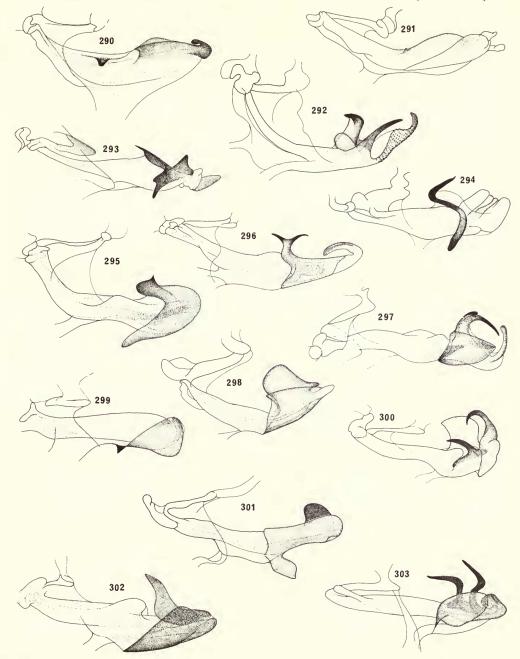
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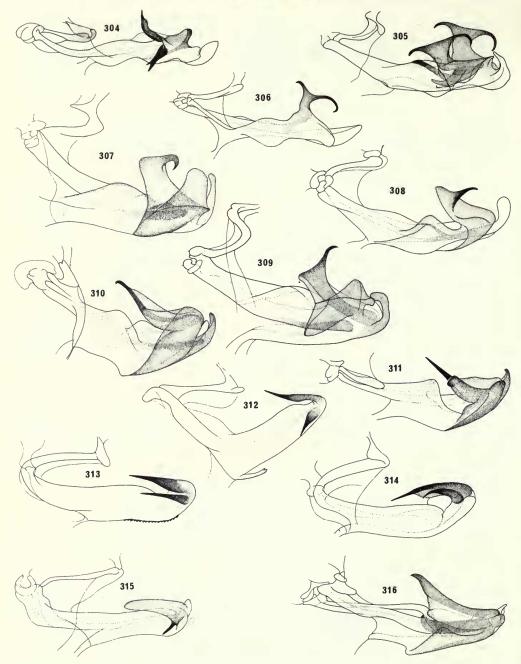
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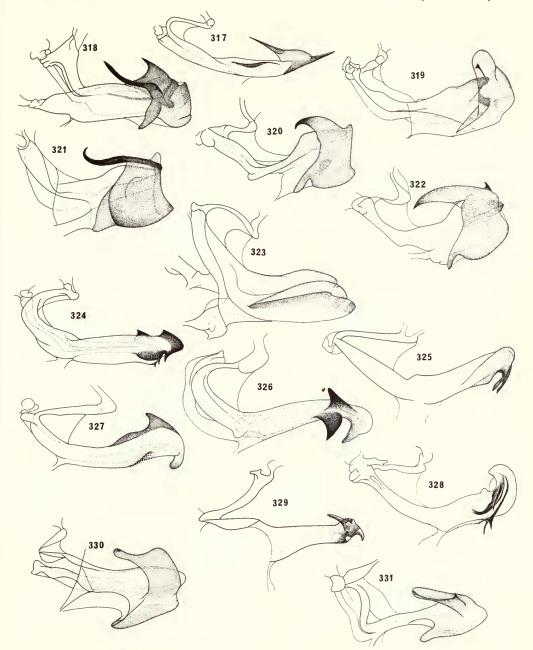
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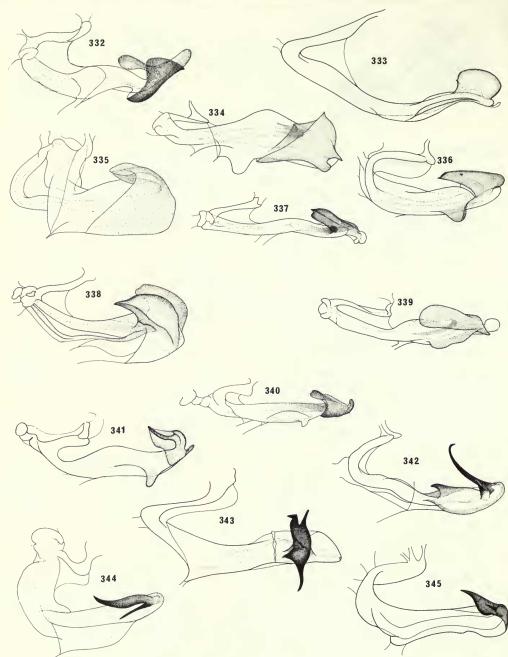
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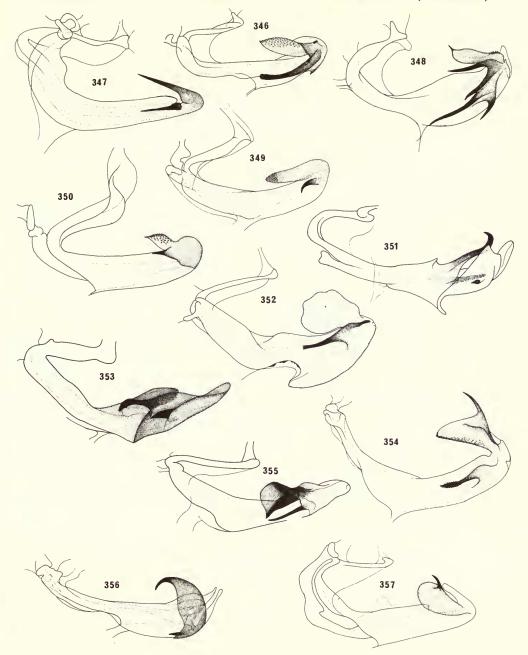
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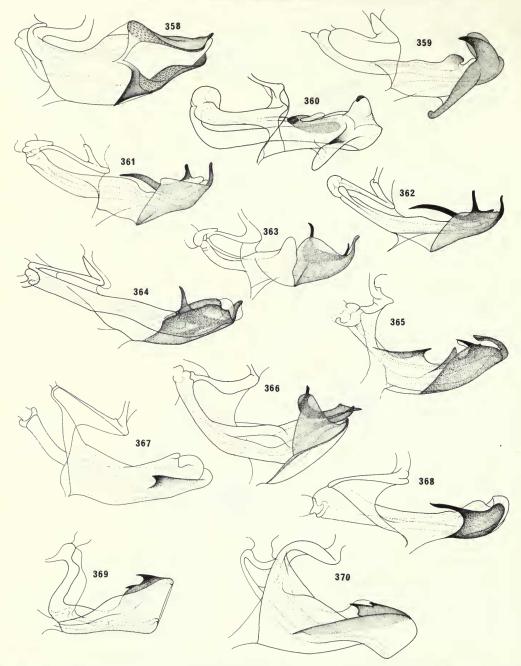


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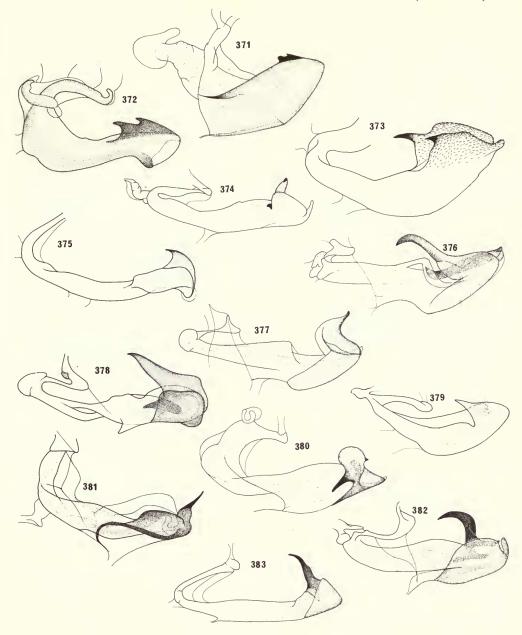


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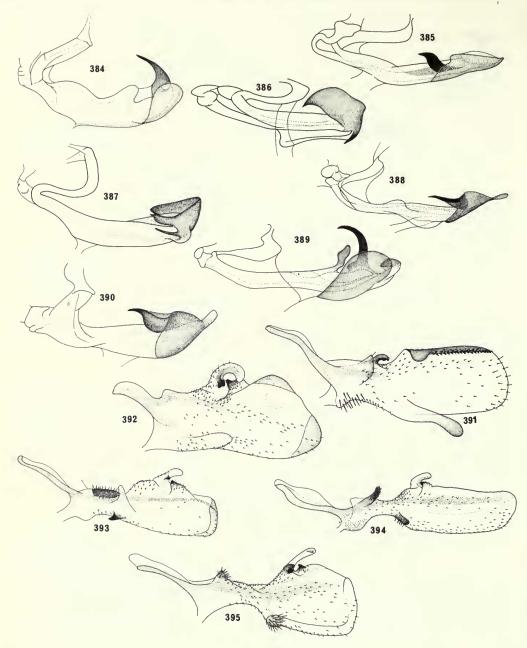
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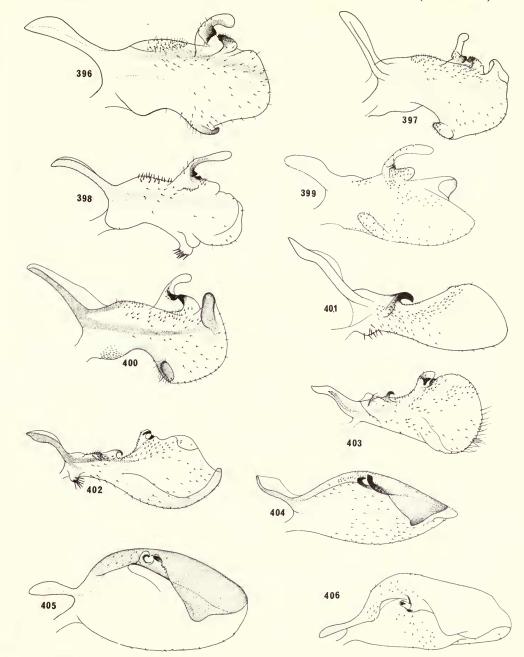
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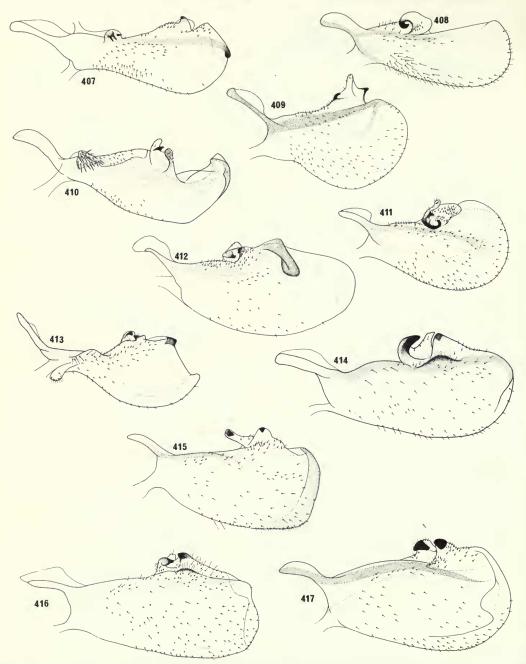
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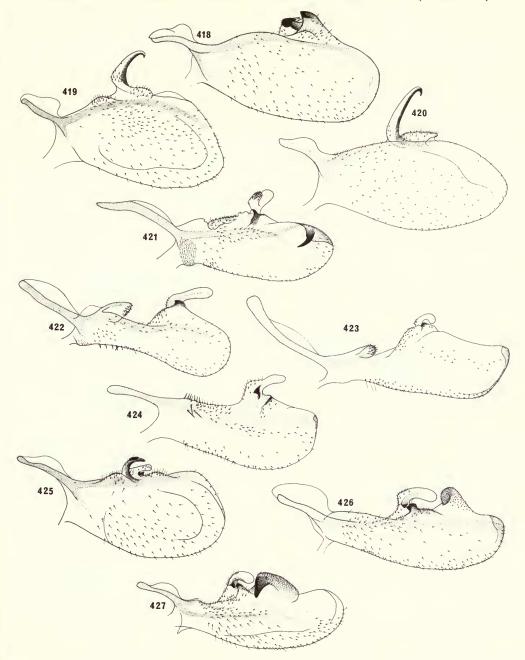
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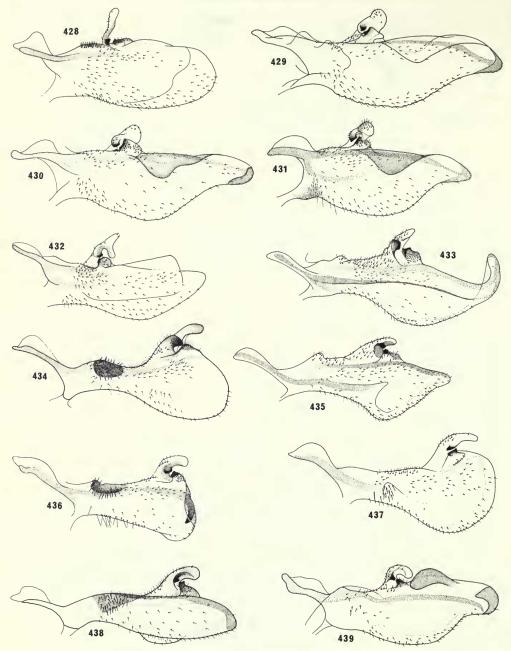
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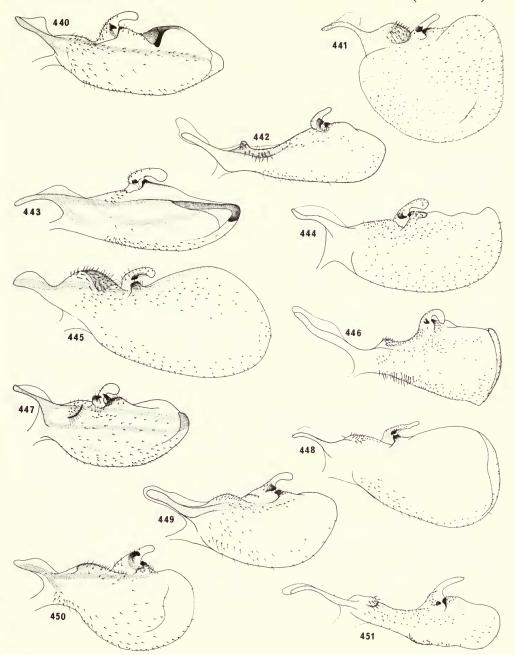
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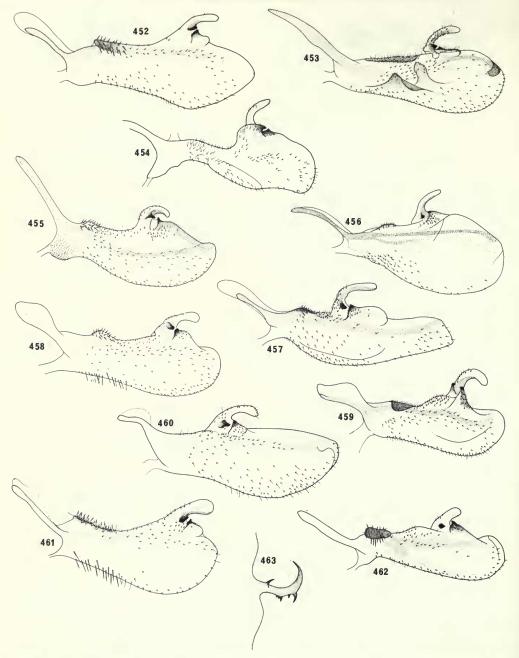
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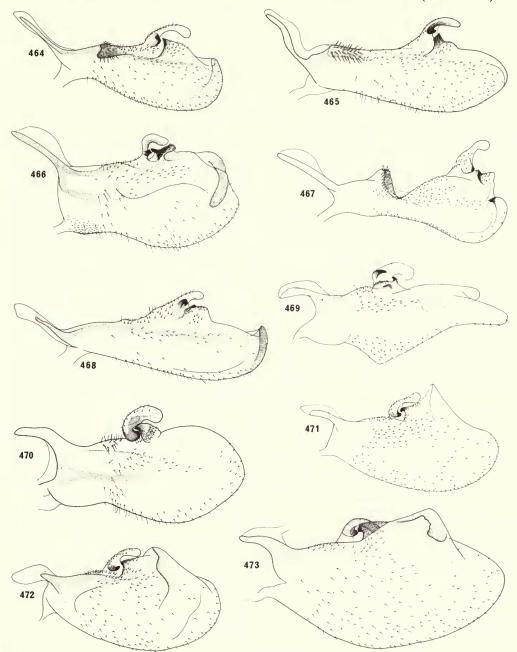
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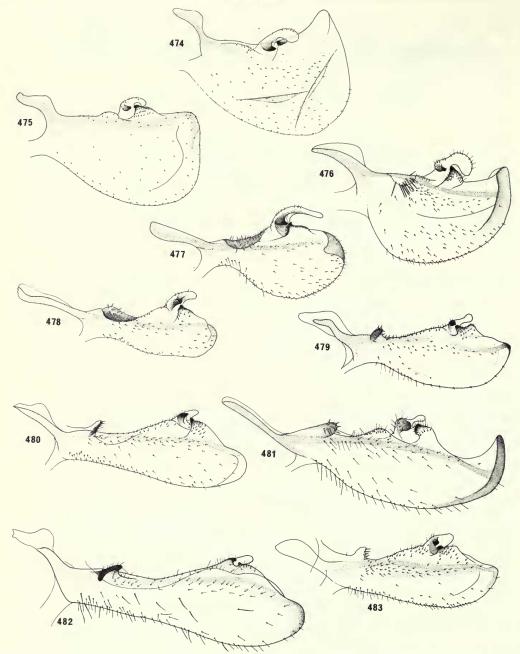
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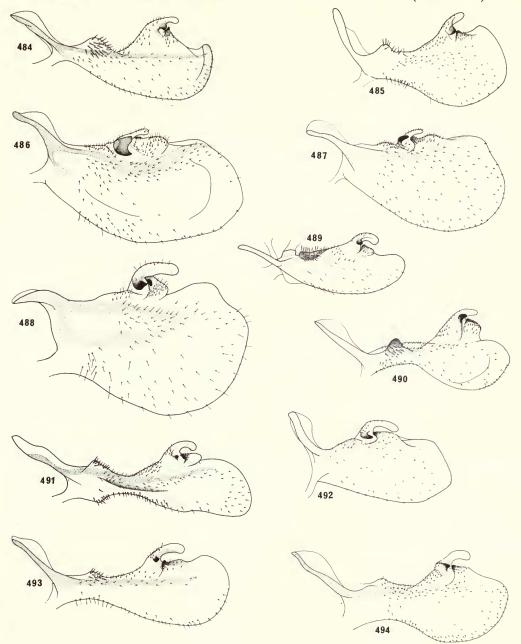
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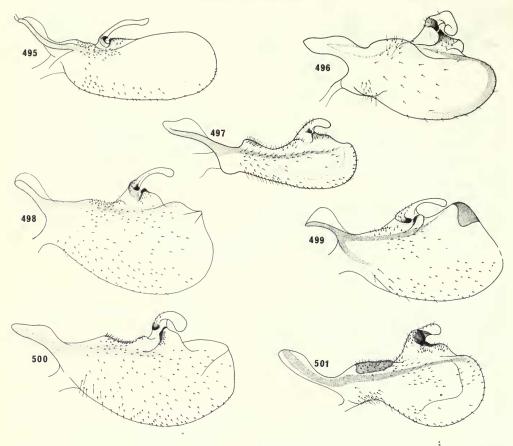
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